DOCUMENT RESUME

ED 316 358 RC 017 391

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TITLE Reconnecting Rural America. Report on Rural Intercity Passenger Transportation.
INSTITUTION Office of Transportation (USDA), Washington, DC.
PUB DATE Jul 89
NOTE 128p.; Summarizes the results of three Regional Symposia on Rural Intercity Passenger Transportation: North Central Regional Symposium (Des Moines, IA, December 7-9, 1987); Eastern Regional Symposium (Annapolis, MD, April 20-22, 1988); Western Regional Symposium (San Francisco, CA, May 18-20, 1988).
PUB TYPE Information Analyses (070) -- Reports - Descriptive (141)

EDRS PRICE MF01/PC06 Plus Postage.
DESCRIPTORS Economic Factors; Government Role; Needs; Needs Assessment; Networks; *Rural Areas; *Transportation
IDENTIFIERS *Deregulation; *National Planning

ABSTRACT

This report summarizes the results of three regional symposia held during 1987-88 to gather grassroots information about rural passenger transportation needs across the country. The first section describes the structural transformation of rural America in the 1980s: (1) the rural economy; (2) rural population trends; (3) impact of information technology on rural areas; (4) rural passenger traits and travel trends; (5) passenger transportation industry shifts; (6) effects of transportation deregulation on rural service by railroads, airlines, and intercity bus companies; and (7) cumulative impact of deregulation on the viability of rural communities. The second section discusses new roles for government and the private sector in maintaining rural mobility, and examines 21 examples of how rural intercity passenger transportation needs can be met. From these examples emerges the concept of a connected rural transportation system, with local providers feeding into an intercity route network. The last section identifies essential components of a national strategy to reconnect rural areas of America: public and private cooperation, mobilization of support, community participation, defined government roles, linking of services, market research and development, diversification of funding sources, resource management, and identification and elimination of barriers. Appendices contain 3 maps; 24 tables; details of the symposium process; goals, constraints, and strategies outlined at each symposium; and planning committee members and speakers. (SV)

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ED316358

United States Department of Agriculture

Office of Transportation

July 1989

Reconnecting Rural America

Report on Rural Intercity Passenger Transportation

PC017391

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Reconnecting Rural America

Report on Rural Intercity Passenger Transportation

by

Eileen S. Stommes

July 1989

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Acknowledgments

The rural intercity passenger transportation effort would not have been possible without the sustained commitment and the enthusiastic support of a large number of concerned organizations and agencies at the national, State, and regional levels. The generous involvement of many individuals who gave freely of their time and encouraged the participation of others with rural passenger transportation interests spoke clearly of the need to address the transportation needs of rural residents.

The contributions of the National Rural Transportation Planning Committee should first be acknowledged, as they began the effort and sustained it through many months of increasingly tight time frames. The members include:

- Airport Operators Council
- American Association of Retired Persons
- American Association of State Highway and Transportation Officials
- American Farm Bureau Federation
- American Public Works Association
- National Association for Transportation Alternatives
- National Association of Regional Councils
- National Conference of State Legislatures
- National School Transportation Association
- North Central Regional Center for Rural Development
- Office of Senator Larry Pressler (South Dakota)
- Office of Congresswoman Virginia Smith (Nebraska)
- Public Private Transportation Network
- Rural America / Center for Community Transportation
- Transportation Research Board / Committee on Intercity Bus Transportation
- United Bus Owners of America
- U.S. Department of Agriculture - Extension Service
- U.S. Department of Agriculture - Office of Transportation
- U.S. Department of Health and Human Services - Office of the Deputy
- Undersecretary U.S. Department of Transportation - Office of the Secretary
- U.S. Department of Transportation - Urban Mass Transportation Administration

Special recognition should go to the United Bus Owners of America and the U.S. Department of Transportation's Urban Mass Transportation Administration for their assistance to the U.S. Department of Agriculture's Office of Transportation and their participation in each symposium. The North Central Regional Center for Rural Development in Iowa, the Northeast Center for Rural Development in Pennsylvania, and the Western Rural Development Center in Oregon, merit special acknowledgment for carrying out all local arrangements for the symposium held in their region.

Each regional symposium took place with the assistance of a regional planning committee which participated in all phases of the symposium, from planning the agenda to selecting the hotel and contacting speakers. In some cases, regional planning committee members also gave presentations, moderated sessions, or served as facilitators at the symposium.

Speakers at each of the symposia provided substantive and significant inut to the discussion of rural intercity passenger transportation. Drawn from a wide range of technical fields, each speakers enriched participant understanding of rural America and its passenger transportation options.

For a list of planning committee members and speakers for each regional symposium, see "Planning Committee Members and Speakers," in the Appendix.

Further program details for each symposium are available in the regional reports, which may be obtained from the U.S. Department of Agriculture's Office of Transportation.

Summary

Transportation in rural America is at a critical juncture. Significant structural changes in the population and economic base have occurred. Substantial loss of air, rail, and intercity bus services during the last decade has left many rural communities with limited access to any form of public transportation.

During 1987, a new effort began to reconnect rural America. It recognizes the local and intercity service offered by a variety of transportation providers throughout the country in addressing the transportation needs of rural residents, and it emphasizes the importance of linking available services into a national system. Leadership in this effort has been provided by the United Bus Owners of America, the U.S. Department of Transportation's Urban Mass Transportation Administration, and the U.S. Department of Agriculture's Office of Transportation. A broad-based national planning committee, as identified in the Appendix to this report, served to direct the initiative and involve others throughout the country.

As part of the initiative, three regional symposia were held to gather grassroots information about rural passenger transportation needs and how they are being met in different areas of the country. The symposia brought together a wide range of public and private agencies and organizations concerned about rural passenger transportation in an effort to facilitate communication and build a national network to enhance rural transportation.

This national report, *Reconnecting Rural America,* summarizes the results of the three regional symposia and was used at the National Conference on Rural Intercity Passenger Transportation in Omaha, Nebraska, on August 22-24, 1988. The North Central Regional Symposium, held in Des Moines, Iowa, December 7-9, 1987, served as a pilot for the regional efforts and was evaluated prior to proceeding with additional symposia. The Eastern Regional Symposium was held in Annapolis, Maryland, April 20-22, 1988, and the Western, in San Francisco, California, May 18-20, 1988. A topical symposium agenda is provided in the Appendix of this report.

An issues paper developed by Eileen Stommes of the U.S. Department of Agriculture's Office of Transportation and Frederic Fravel of Ecosometrics, Inc., for the regional symposia briefly outlined the demographic and economic situation in rural areas, and described the impact of transportation deregulation on rural passenger transportation. Information presented in the paper is combined with the speaker presentations and workshop output to provide a summary of all three symposia. Presentations describing public and private rural transportation systems are provided for each symposium as well as the key components identified by symposia participants as critical to a national strategy for rural passenger transportation. Fravel and Martha Bearer of the U.S. Department of Agriculture's Office of Transportation compiled transportation statistics for each region and developed the tables presented in the Appendix.

Information presented at the three regional symposia demonstrated that service indeed has been lost in rural communities throughout the last decade. But while service has been lost, a variety of examples of how rural intercity passenger

transportation needs can be met were identified and are used as illustrations in this report. Although the examples should not be considered typical of transportation services offered rural residents, the concept of a connected rural transportation system is emerging, with local providers feeding into an intercity route network. The success of this concept is dependent upon each community tailoring transportation to meet its locally defined needs. The examples provide insights into rural passenger transportation with several themes surfacing. These themes were addressed by Dr. Don Dillman of Washington State University at the Western Regional Symposium.

The first theme is that traditional intercity transportation strategies are not working well in rural areas. An intercity bus company using standard, 47-passenger coaches over fixed routes which stop in every community and deliver passengers to a single downtown terminal can no longer generate sufficient ridership. Meeting the average needs of the average customer most likely will not meet the needs of any particular customer. Rather, flexible point-to-point service tailored to particular passenger needs is beginning to take the place of traditional, fixed-route systems.

The second theme is that rural passenger transportation needs can be dovetailed with the shipment of goods. Increasingly, rural transit is turning to package express service to generate additional revenues to support transportation of passengers in sparsely populated rural areas. Since many products now are shipped in small batches on demand rather than in bulk containers, there are opportunities to combine freight and passenger movements, thereby reducing costs and sustaining services for both.

A third theme focuses on avoidance of a "one system for all" mentality. Rural America is extremely diverse: The rural intercity transportation needs of northern Nebraska differ from those of northern New York State, which in turn are different from those of eastern Washington. Any national policy for meeting rural passenger transportation needs should be designed to facilitate meeting different types of regional needs rather than meeting all regional needs in the same way.

Fourth, greater reliance on information technologies will not decrease the need for physical travel. Although it may appear that greater use of facsimile machines, computer modems, and video communications will decrease the need for physical travel, the evidence thus far indicates that the stronger the telecommunications linkages, the more people travel. As society moves into a period when goods and services produced in one community are likely to be consumed in another, physical movement of people and products is increasing in conjunction with expanded communications linkages. Thus, enhanced information technology capabilities will facilitate greater efficiencies in providing transportation to rural residents.

Fifth, observing informal transportation systems can assist in designing formal systems. Rural people without access to transportation have demonstrated considerable ingenuity in meeting their transportation needs. Exploring the informal ways in which rural residents meet transportation needs can help identify the insurance, licensing, and regulatory barriers to local entrepreneurs who wish to initiate rural transportation services.

Sixth, equity and welfare issues should be separated from economic issues. To a large extent, the discussion of rural intercity passenger transportation has been limited to meeting the needs of people who have no other means of transportation. Since the cost of a bus ride has remained relatively low, ridership is dominated by those who have no other alternative. Those who can pay are driven away by the lack of timeliness, the limited number of service points, and the image of bus travel. An alternate way to approach intercity travel would target those who can pay for quality service while developing options for subsidizing those unable to pay.

Finally, rural passenger transportation cannot be considered in isolation from other transportation concerns. Rural America's transportation networks link into the national transportation system, forming a continuous system that pulls together the many parts of the Nation. Rural passenger transportation must be viewed within the context of national transportation policy and programs. An opportunity to do so exists today in the Transportation 2020 Program—an effort under way to reach a broad consensus on a new, long-range surface transportation program for the Nation in the 21st century.

This report presents the issues and concerns of those involved in rural intercity passenger transportation throughout the Nation. It also summarizes the nine components considered to be key to the development of a national strategy for reconnecting rural America: Public-private cooperation, mobilization of support, community participation, defined government roles, linking of services, market research and development, diversification of funding sources, resource management, and identification and elimination of barriers. In defining the problems, the report demonstrates how service is currently being provided by both the public and private sectors. It reiterates the need for coordination and cooperation among all those involved in rural passenger transportation. Only through such teamwork can a connected rural passenger transportation system be developed and maintained.

Rural American: Structural Transformation in the 1980's

Rural America in the 1980's is responding to significant structural changes in its population and its economy base. Rural population exceeded urban population until 1920. From 1920 to the present, however, the number of rural people has remained between 50 and 60 million, shrinking from 50 to 25 percent of the Nation's total population. While rural areas share many of the economic trends taking place in American society, some of those trends are having a disproportionate impact on rural residents.

The Rural Economy

Agriculture was once the primary mainstay of the rural economy, with a majority of rural counties classified as predominantly agricultural until the early 1950's. A recent U.S. Department of Agriculture study (as cited in figures 1 to 3 in the Appendix) indicates that the rural economy today is diversified, and classifies the Nation's 2,443 rural counties into 8 categories according to their principal sources of income or employment. The categories are:

I. Agriculture dependent. Largely concentrated in the Plains States and the upper Midwest, 702 counties, or 29 percent of nonmetropolitan counties, count on agriculture for their economic mainstay. (See figure 1.)

2. Manufacturing dependent. Located mostly in the eastern half of the Nation, these 678 counties, or 28 percent of nonmetropolitan counties, experienced a reduced rate of population growth since the 1970's. (fig. 2).

3. Mining dependent. Mostly concentrated in the West, but including parts of West Virginia and Kentucky, mining accounts for 200 counties or 8 percent of nonmetropolitan counties.

4. Specialized government. Uniformly distributed across the country and including university counties, military installations, State capitals, these 315 counties, or 13 percent of nonmetropolitan counties, rely on government for their primary income source.

5. Persistent poverty. Ten percent of nonmetropolitan counties, or 242 counties, are counties whose income has been in the lowest fifth every decade since 1950. Located largely in the South, they include high concentrations of minority population and low levels of adult educational attainment.

6. Federal lands. Ten percent of nonmetropolitan counties, or 247 counties, are Federal lands, with generally low population density. A primary source of income is recreation.

7. Retirement counties. Twenty-one percent of nonmetropolitan counties, or 515 counties, are retirement counties found in a strip from southern Missouri through Texas and in Florida and the Southwest. Averaging 34-percent population growth during the 1970's, they are continuing to grow during the 1980's. (See figure 3.)

8. Ungrouped counties. Fifteen percent of nonmetropolitan counties, or 370 counties, do not fit into any one of the other categories since their income sources were diverse and their 10 percent rate of growth during the 1970's was average for rural counties.

Several observations provide perspective on the highly diverse nature of the rural economy today. Nationwide, less than 2 percent of our population lives on farms. The farm economy directly involves less than one in five rural workers. Agriculture itself is facing serious difficulties as it attempts to match supply with demand. Stiff international competition and the strong dollar have weakened the ability of American farmers to export their products to traditional overseas markets. Rural areas dependent on agriculture are losing not only operating farms, but also are seeing the local hardware store, the local drugstore, and the local cafe close down as more farmers leave agriculture.

Within agricultural counties, the trend is toward larger farms (in excess of 450 acres), fewer farmers, and greater crop specialization. However, not all agricultural counties exhibit this general trend. Exceptions include the fringes of major metropolitan areas in the "new South," New England, North Carolina, and New Jersey. In these areas, an affluent urban population calls for fresh food, a demand leading to specialty crops on smaller farms. These areas also involve the phenomenon termed "sundown farmers," individuals who hold full-time service/public sector jobs and who farm at sunup and sundown.

Rural America has seen a mild resurgence of nonagricultural, natural resource based economic activity, particularly in mining, fishing, and forestry. These activities are more scattered today than in the past. Often they are integrated into other rural economies in nontraditional ways. The craft industry, specialty furniture, other forest byproducts (Vermont maple syrup, for example), and direct marketing of fresh fish provide examples of "niche economies" springing up in the rural economy.

While the growth of manufacturing in rural areas originally helped many rural households raise their income levels, declining productivity in American industry has rendered many rural industries especially vulnerable to international competition. Manufacturing job losses have been heaviest in low-wage industry and blue-collar occupations, both heavily concentrated in nonmetropolitan areas. As a result, nonmetropolitan manufacturing counties are experiencing continuing population declines. Job losses in the goods- producing sector thus are having a disproportionate effect on the economies of rural areas.

In many rural areas, the service economy has replaced traditional manufacturing activities. New opportunities are being created as the rural economy becomes increasingly service oriented. Services now employ more rural workers than does manufacturing. An example is the significant number of tourism and retirement communities being created in certain regions throughout the United States (fig. 3). However, rural areas are not attracting large numbers of high-tech, high-paying jobs. Rather, they appear to be drawing low-wage jobs, leading to concerns that rural areas will experience an overall decline in wage levels. Concern for the quality of these new

jobs calls attention to their low pay, their low skill levels and accompanying lack of challenge, as well as their high dependence on the health of the regional and national economies.

The institutional mix in rural counties is changing, although it is not a consistent mix from one area to the next. Thirteen percent of the Nation's rural counties are dependent on special government services, including the military, hospitals, State capitals or county seats, and junior colleges and 4-year schools and universities.

The rural economy has clearly diversified, with three major trends emerging: The decline and change within agriculture; the decline in manufacturing and the rise of the service sector; and the diversification of the service industry, including the rise in number of professionals in the rural service mix and the growth of tourism/recreation.

Rural Population Trends

Although rural employment has increasingly come to resemble metropolitan employment patterns, several features of the rural employment force differ from the metropolitan workforce and affect the industries that will settle in rural areas. Nonmetropolitan areas have a substantially smaller proportion of their population in the 20-44 age range and a substantially higher proportion in the 55-and-over category. Rural areas lag behind metro areas in number of college graduates and in years of education. Nonmetropolitan counties have a higher average proportion of disabled persons than metropolitan counties. While nonmetropolitan women with children are as likely to be in the labor force as metropolitan women, they are not paid as well and are employed more frequently in manufacturing and low-income service jobs.

Changes in the rural economy have had a corresponding impact on the rural population. Rural areas traditionally have had a higher proportion of children, a relatively lower percentage of work-age population, and a larger proportion of elderly—a population profile accounted for by migration of the workforce to areas with greater job opportunities. While the nonmetropolitan areas in 1980 still had a larger proportion of children than the metropolitan areas, they also had a larger elderly population, as the elderly both remained in rural areas and migrated there to retire. Studies conducted since the 1980 census in rural areas affected by the agricultural crisis indicate that some of the very isolated rural communities are slowly losing population as working-age residents leave to seek job opportunities.

Impact of Information Technology on Rural America

Beyond the changes taking place in the rural population and in the rural economy, societal trends are having an impact on the lives of rural Americans and are affecting the mix of transportation services available to rural residents. Society at large is moving into an era of information technology which is affecting the work conditions and lifestyles of rural Americans. To assess where rural America may be in the future, examining where it has been clarifies past, current, and future trends.

American society has experienced three eras of social and economic change in this century. The first era, community control, was in place around the turn of the century.

Rural areas were characterized by small family farms, with the local economy dominated by agriculturally related businesses. The second era, described as mass society, emerged by mid-20th century. People broke out of their communities into a larger world as the telephone connected the Nation and motor vehicles facilitated travel. National corporations rose during this period. The third era, the information age, is emerging today. Characterized by the marriage of computers, electronics, and telecommunications, the information age generates speed and greater product selection.

The market implications of the information age for rural areas are far reaching and significant. While market orientation was local or regional in the era of community control, and became national under mass society, it has now become worldwide in focus. Product orientation has changed as well. Under community control, hand-crafted goods met local needs. In mass society, goods were mass-produced for a uniform "mass" market. In the information era, however, products are individually machine designed to meet individual customer needs/wants. Barriers to product acceptance have changed. In community society, community acceptance was primary. In mass society, mass acceptance was key to securing customer sales. In an information era, individual customer satisfaction is essential.

The telephone has contributed to productivity in each era, but has taken on a different focus in each period. In community society, the party line allowed more rapid access to local services. In mass society, voice-to-voice connections permitted access to extra-local goods and services, which allowed the emergence of the corporate form of organization. In the information era, machine-to-machine technology allows instant access everywhere.

Since most rural areas were agricultural until the 1950's, the following summary will describe changes taking place in the agricultural economy and, by extension, within the rural economy as well. As described briefly above, orientation to market was shaped by each era. In the community era, agricultural production was focused on local markets. During the mass society period, farmers expanded production horizons to meet mass consumption needs. In the information era, farmers are beginning to produce to meet niche consumption needs. An example is the specialty produce market emerging outside major metropolitan areas such as New York City, where farmers are growing small quantities of special crops to meet the needs of ethnic groups and restaurants.

Crop production patterns also have adapted to the needs of each era. In the community era, farm production was balanced to meet most production needs of a particular locale. During the period of mass society, agriculture evolved to production of a single major commodity. During the information age, farmers are producing a variety of crops, each designed to target a specific market. Farmer linkage with the consumer also has changed, with varied, brokered patterns characteristic of the community era. During the mass society period, farmer contact with the consumer was limited. In the information age, farmer-consumer relations have changed so that farmer contact is substantial and specific. Farmers' markets have put producers face

to face with consumers, while one-on-one contracts with specialty stores and restaurants have challenged and enhanced farmer entrepreneurial skills.

Farming methods have evolved with each period. Labor-intensive methods characterized the community era. Energy- and capital-intensive methods were common in the mass society period, involving use of irrigation, pesticides, and large equipment. In the era of information, the use of the computer and telecommunications are emerging as essential components in managing farm assets. In fact, 52 percent of all businesses now use some form of computer technology.

As can be expected, the information era has implications for job creation in rural areas. The employment emphasis is on service-sector jobs rather than resource-based industries or manufacturing. That employment will occur in newer, smaller forms of organizations that will arise to meet market niches. Those organizations will be able to locate in any geographic area with telecommunications capability, an ability that presents challenges to rural areas lacking telecommunications. Since communications are critical for information-age firms, location decisions will be made on the basis of linkages with the outside world.

Although telecommunications has facilitated information exchange, it has not reduced physical travel needs. Experience with long-distance telephones demonstrated that the more people traveled, the more they relied on long-distance communications. Transportation needs have not been reduced, but modified so that the form of transportation may need to be more flexible to respond to a greater variety of physical transportation needs.

Rural passenger transportation providers can learn from informal systems. While formal systems are necessary, many times informal networks evolve to meet specialized passenger needs. Those networks can provide formal systems—i.e., intercity carriers and rural providers—with alternative approaches to designing rural transit systems.

Rural Structural Trends and Measurement

Before discussing the changes taking place in rural intercity passenger transportation, it should be pointed out that observations regarding the demography and economy of rural America will vary significantly depending upon the reporting unit used. The utility of rural demographic and economic indicators will differ according to the level of analysis and according to geographic location.

Variations by level of analysis—the Nation, region, State, county, and locale—are quite clear. States may grow while individual rural market regions within those States may decline, sometimes dramatically. Regional demographic data indicating economic growth would be of secondary interest to a community-level transit operator in a declining local economy.

While these differences according to level of analysis are apparent, variations from one rural area to the next may not be so obvious. It is now common knowledge, for example, that much of rural America is no longer dependent upon agriculture. The traditional generalizations assuming a strong link between agriculture and the rural economy must then be considered within a local context where agriculture may no longer be the economic mainstay.

Demographic measures are of particular interest to transportation planners. Several critical indicators summarize what is taking place in rural areas. These include total population, number of households, land area, population density, and comparisons among reporting units, i.e., States and counties.

Several examples will illustrate how the level of analysis and geographic location can affect the use of statistics. In the eastern region, for example, Vermont has the lowest population, New York the highest. Rhode Island is the smallest State, while Georgia is the largest. New Jersey is the most densely populated State, Maine the least densely populated. While these indicators are important when aggregated at the State level, they are of little utility to the market-area planner involved in designing a local transportation system.

A significant piece of information involves the rate at which population change is taking place, or the rate at which a market is expanding or contracting. Florida is experiencing the highest rate of population growth, expanding 16.6 percent from 1980-85. West Virginia, on the other hand, experienced a population decline of 0.7 percent during the same period. Again, this information is useful only for examining broad, contextual demographic changes and not for designing transit routes.

For most local activities, including transit, information must be provided at a more appropriate, or local, unit of analysis. Traditionally in the States east of the Mississippi, these indicators are found at a county, minor civil division, and neighborhood (city block) level of analysis. In the United States, comprehensive planning would include information on States, counties, municipalities, townships, school districts, and special districts.

Within the 50 States, there are 3,041 counties, 19,083 municipalities, 16,083 townships, 15,032 school districts and 28,753 special districts, as published in *The New American Heartland*. These data indicate that below the county level there are at least 75,000 possible units of local government. A disproportionate share of these units lies east of the Mississippi, since those States settled first tended to have more complex local jurisdictional areas. There also tend to be proportionately more of these units in sparsely populated rural areas. The more urbanized areas tend to have school and special districts coterminous with city boundaries. In rural areas, on the other hand, special districts overlap at all levels, sometimes at a subcommunity level and sometimes at a multicommunity level. For example, Shelburne, Vermont, has two sewer districts, an open country sewer (unregulated) option, an elementary school district, and a high school that is part of a multitown special union school district. Each of these local units has data reporting responsibilities and most of them begin with a

basic population or area head count, some estimate of area capacity, population distribution, and a measure of change.

There is, then, an almost bewildering array of local demographic and economic reporting units. They represent units of local governance and decisionmaking where information for local transit planning in rural America is available. However, the smaller and more local the unit of government for which information is sought, the more expensive and time consuming the collection of that information. As data become more specific and less generalizable to regional trends, a tradeoff emerges. A greater grasp of global trends is sacrificed for a better understanding of local events.

However, many local operators "drop" one more level of analysis from the market area to the actual customer. With the popularization of the personal computer, it is in fact possible for local transit authorities to maintain demographic data bases focused on clients, the people using the service as passengers or for shipping freight.

Clearly, the most useful information is that demographic and economic data that describe existing clientele. In combination with existing local and regional data established in response to Federal, State, and local reporting responsibilities, data on a system's clients can be compared and contrasted with the larger level of analysis to estimate market potential and establish realistic marketing strategies.

Rural Areas and Personal Mobility: A Changing Equation

The demographic and structural changes taking place in rural areas are accompanied by structural changes within the passenger transportation industry itself. Changes have occurred within the passenger transportation idustry in conjunction with demographic and economic trends taking place within the larger society. Passenger patterns have thus both caused and adapted to modifications within the passenger transportation industry. Deregulation of the industry responded to changes in passenger use: The impact of deregulation continues to shape transportation services.

Within the passenger transportation industry, changes have taken place in types of transportation selected, or modal preferences, common carrier services, traveler concerns, and in the public sector. Each of those shifts within the passenger transportation industry is having an impact on the services offered to rural residents.

Passenger Transportation Industry Shifts

Modal Shifts Modal changes have taken place over this century as passengers have turned from the train to the intercity carrier to air travel and the automobile. The passenger train, once serving a large number of points, has shrunk to a skeletal main route system serving about 500 cities. The intercity bus, which replaced much branchline passenger train service in the 1930's, is not thriving today. The number of passengers carried by intercity buses has been in a steady decline since the end of World War II. Class I carriers, the largest bus companies, carried a little over 152 million passengers in 1975, but only 90 million in 1985.

Another factor affecting rural mobility is the general long-term trend toward increased automobile ownership and usage. From 1975 to 1986, for example, the number of vehicle miles traveled nationwide increased by 38 percent. The number of vehicle miles traveled in the north central region increased by 25 percent (Appendix, table 1a), with the number of vehicle-miles increasing in the Northeast by 30 percent (table 1b), the south by 45 percent (table 1c) and the west by 55 percent (table 1d). During the same period, the number of vehicles in use nationwide increased 22 percent.

The average number of vehicles per household increased from 1.05 in 1960 to 1.61 in 1980, with the majority of households now having two or more vehicles available. The number of households without any auto declined from 22 percent to 13 percent. Of the total number of households without any automobile, 20 percent live in New York City alone and 35 percent live in center cities other than New York City. The total number of vehicles increased during this 20-year period from 54.8 million to 128.7 million and the number of users increased from 43 million to 83 million.

The automobile competes with the airlines for short distance markets. Each automobile averages about 10,000 miles per year, a figure expected to rise slightly as the price of gasoline remains lower than in the early 1980's. A factor contributing to the increase in miles driven is the rise in total fleet miles per gallon, up from 13 miles per gallon in 1975 to 18 in 1985.

Automobile travel has been greatly facilitated by the Interstate highway system as well as improved primary and secondary highway networks. The automobile, while creating congestion in large metropolitan areas, has reduced the isolation of many rural residents. However, not all rural residents can afford to own and operate a vehicle.

Airlines have increased in importance. In 1975, airlines carried almost 190 million passengers compared with 375 million in 1985. The industry continues to restructure in the wake of airline deregulation in 1978. The most recent changes focus on intercarrier service and marketing arrangements, with commuter/regional airlines affiliating with major trunk airlines.

Small communities are generally served by commuter/regional airlines. Since deregulation, commuter airlines have been evolving to serve the needs of smaller airports. The regional airline fleet will continue to increase, according to the Federal Aviation Administration. From 1978 to 1987, the fleet grew by 53.2 percent to a total of 1,604 aircraft. While commuter aircraft immediately after deregulation tended to be smaller, the average number of seats per aircraft is increasing, with the largest growth expected in the 20 to 40seat category and in the greater-than-40-seat category. These two categories are expected to account for 32.9 percent and 24.4 percent, respectively, of the total fleet by 1999.

Common Carrier Services Interstate common carrier services have changed from a regulated, protected environment to an intensely competitive one as a result of deregulation. Under regulation, companies focused on convincing regulators that

granting or refusing an entry/exit request would be beneficial or harmful. Today companies are driven by the bottom line. Their objective is to maintain market share and, if possible, expand their share. Perhaps the most significant change since deregulation is the managerial change from a regulated approach to that of an aggressive risk taker. Some individuals and some firms have not been able to make the transition. Some small firms, for example, may not be able to compete since they lack the in-house skills available to large companies in their marketing, accounting, and operations departments.

As a result, the pattern of services available to rural areas has been transformed. Many small communities served under regulation no longer receive service as rail, air, and bus stops were discontinued where low ridership did not generate sufficient revenues. However, service is beginning to emerge in smaller cities as smaller companies tailor their service to meet local markets. For instance, branch intercity bus lines are operating in Oregon, as are commuter airlines. Three airlines now serve Redmond in the central Oregon area, including one sponsored by the the local community.

Service networks have changed as well. Amtrak is essentially a network of main routes. The airlines have gone from a series of lineal main and branch route networks to a hub and spoke arrangement, with regional/commuter airlines providing some lineal local service.

The intercity bus network is composed of main, long-distance routes with shorter service segments in densely populated areas. Branch and link routes are connected to these main routes, with branch routes generally serving places missed by main routes. Link routes connect parallel main routes, reducing the need for significant out-of-direction travel.

The concept of market area continues to change with increased availability of automobiles. There appear to be secondary and even tertiary markets for airline services, a condition that may hold for bus and train as well. For a branch bus line, for example, the market along the entire route must be considered, not only a single community needing service.

Traveler Concerns The main thrust of deregulation has unfettered the transportation industry, resulting in competition between and among the various modes. Recent incidents in both the air and bus industry indicate, however, that safety may be a concern in a deregulated environment. In some cases, service quality also may limit passenger utilization of a given service.

One way to address these concerns is the establishment of State-level passenger services organizations to balance the needs of commerce with those of the traveler. Schedule coordination, interline and intermodal joint ticketing, and better information on services available are some areas that may need improvement.

Government Involvement Intercity travel has been heavily influenced by government policy. The Federal perspective on interstate passenger and freight carrier service changed from close regulation to endorsement of an openly competitive environment. Specifically, the Federal Government dropped the concept that carriers had an obligation to provide a geographically inclusive network of service, even though some routes were operated at a loss.

The network obligation concept evolved from regulation of the railroads, with their networks fixed by rail. Aircraft and motor vehicles are not nearly as constrained by a physical network and can adapt to changing markets and environments, even under regulation. Regulation did foster stability and reliability, but not dynamic response, efficiencies, or lower costs in dense corridors.

Under regulation, many services to smaller communities were subsidized by the interstate carriers with an extensive route network. Single branch-line companies and companies with few routes, however, did not have main-line revenues to subsidize their service. When these companies became unprofitable, regulators were forced to permit them to abandon unprofitable routes since there were no cross-subsidies.

During the 1970's, the Federal Government and many State governments reorganized agencies involved in transportation into larger transportation departments in an attempt to coordinate various activities. While the responsibilities of regulating motor carriers, licensing, revenue collecting, and the construction and maintenance of highways were fairly clear, many passenger transportation service roles were not. Each State continues to maintain a slightly different view of its responsibilities for intercity passenger transportation.

In general, the public role in transportation has been the provision of physical facilities. Highways and roads, most airports and all airways, some ports and most waterways are within the public purview. Passenger and freight services are primarily in the private sector.

State transportation planners generally focus on the marginal pieces of the larger network, usually small community services such as air, bus, and branch rail freight. Public planning as applied to highways, air, and urban transit has not been used in rural passenger services.

Local governments, on the other hand, demonstrate an uneven record in relation to intercity buses. While many cities tried to attract a railroad stop, and some have attempted to develop airline service, few have advocated intercity bus service. Some cities, however, have begun to demonstrate a commitment to intercity buses and passenger rail by building intermodal terminals. Kalamazoo, Michigan, and New Orleans, Louisiana, have done so, while Buffalo, New York, has built an intercity bus terminal. Nevertheless, such examples remain the exception.

Rural Passenger Traits and Travel Trends

While no comprehensive studies of rural intercity passenger transportation have been conducted to date, several surveys indicate that these structural and modal changes are beginning to affect the rural passenger transportation system in a variety of ways.

One survey covering national trends, the 1977 National Travel Survey, covers only trips over 100 miles and does not break out charters versus regular routes. Key findings indicate that the typical intercity bus passenger has a lower median income, is more likely to be minority and female, and has a lower level of education than do air or rail passengers. Thirty percent of bus passengers originate from towns under 50,000 population, while 19 percent of rail passengers and 18 percent of air passengers come from similar population centers. Destinations of bus passengers are also more likely to be small towns than are air and rail passsengers. Fifty percent of bus passengers are age 24 and under, while 13.4 percent are 65 and over. Fewer passengers are in the 25-40 age category. Trip purpose is primarily nonbusiness, and is generally for visiting friends and relatives or for entertainment and sightseeing.

Several States have conducted their own intercity bus surveys over the past l0 years, including Iowa, Georgia, Michigan, New Mexico, North Carolina, Oregon, Tennessee, Texas, Idaho, Wisconsin, and Nebraska. Findings vary considerably, but general characteristics are in accordance with the 1977 National Travel Survey. The majority of intercity passengers are low income, with 31 percent in New Mexico and 60 percent in Oregon under $l0,000 annual income. Thirty-seven percent of Michigan riders and 35 percent of Georgia riders had annual incomes under $9,000. Again, trips were primarily taken for social reasons, with medical trips ranging from 1 to 12.4 percent, shopping trips from 1.2 to 3.0 percent, and school trips from 1.5 to 6.8 percent of total trips. Some riders had alternatives available, with two-thirds possessing a drivers license: 58 to 82 percent lived in households with one or more automobiles. However, 20 to 47 percent of users indicated they had no automobile available for the trip.

Changes in passenger characteristics can be assessed by using studies in Michigan and Wisconsin, since each State repeated its intercity survey after about 10 years.

Michigan experienced a decline in intercity bus ridership of at least 34 percent, possibly as high as 44 percent. Fewer people walk to the bus, with 54 to 64 percent using the automobile to get to the bus station. Trips to visit friends/relatives declined from 5l to 44 percent. Personal business trips declined by 18 to 25 percent, with work trips remaining low at 8 to 10 percent. Frequency of use is down, as the 1977 survey indicated that 30 percent had 10-plus trips the previous year, while the l985 survey showed that 20 percent had 10 or more trips the previous year. Fewer users came from no-car households. Students declined from 30 percent to less than 20 percent during a period when college enrollments were stable. The number of retired passengers stayed the same, while the number of elderly increased.

In Wisconsin, 47.5 percent of those surveyed in 1975 had no automobile available for the trip, while in 1985, 33 percent had no alternative transportation. However, 49

percent of those using the bus in 1985 had no other way of making the trip. As in Michigan, trips to visit relatives/friends declined. There were, however, increases in school and medical trips. Wisconsin also measured dependence on intercity bus, finding that 63 percent of those over 65, and 67 percent of those under 16, were most dependent on public transportation. Persons shopping and making social/recreational trips are more dependent on the intercity bus in rural areas than in urban areas.

Several general conclusions can be derived from currently available intercity bus studies. Demand is down. Trips are shorter and less frequent. The apparent decline in social/recreational visits by bus may be caused by a shift of these trips to air and automobile, especially to longer air trips utilizing discounted fares. The increase in rural elderly passengers has not yet been translated into increased regular-route, intercity ridership. Ridership of rural elderly may not rise in the near future, as they may continue to use their automobile longer than was customary in the recent past. School/university trips are down, as more students own automobiles and as fewer students come from rural areas. An additional factor is the increased decentralization of State college systems, with growth in community colleges.

These changes in ridership will, in turn, affect the level of services available to rural areas. As more population centers in declining rural areas drop below a minimum population necessary to sustain basic services, more rural people will be forced to travel longer distances to access medical care, shopping, and other services. Yet a sparsely populated rural area may not be able to generate the ridership necessary to support, without subsidy, an intercity passenger system.

Need vs. Demand: Application of Market Concepts

In discussing the impact of population and economic changes on transportation, it is useful to draw a distinction between need and demand. Demand is a specific concept, while need is a more descriptive term. Demand measures actual usage/ridership and is essential in designing transportation service. The term demand might be better described by "market," since it conveys the notion of people willing to exchange dollars for a service or good to meet a desire/need.

Need, on the other hand, is described in terms of number of persons, such as the elderly and the handicapped, who may be dependent on public transportation to meet health care, shopping, and other personal requirements. Need for transportation may not translate into public transportation demand, as individuals who may need transportation may be able to meet that need outside the public transportation system.

It is important to distinguish between need and demand, since assumptions can be made about the "need" for intercity service. Some people depend on common carrier services to meet their mobility needs, but it is difficult to know how many people fall into this category. It may be that the best way to meet some of these transportation needs may be through volunteers, social services or other arrangements when service demand cannot generate sufficient revenues for a regular-route, intercity carrier.

While the demand for rural passenger transportation may appear to be uncertain, need for air service may be expanding. As rural areas gain service industries linked with national and international markets, the need for industry access to air service becomes increasingly critical. Although researchers say the evidence pointing to such increased demand is not clear, community access to air service may influence service industry location in a particular rural area. Even if a rural area has access to air service, demand for intercity bus transportation may remain, as airlines are more likely to serve business travel than the typical person who travels by bus.

Transportation Deregulation and the Rural Areas: Rail, Air, and Bus

While economic and structural transformations are creating changes in the demand for transportation, deregulation has modified the transportation system serving rural areas.

Transportation is vital to the survival of rural communities. Agriculture, manufacturing, and the service sector rely on an effective and efficient transportation system. Rural residents depend on transportation to link them with basic services, shopping, employment opportunities, and recreational and social outlets.

Tying rural communities into the economic mainstream was long a concern of Congress, since economic development required an effective transportation infrastructure. Regulation of the transportation industry was spurred by a desire to ensure access to needed transportation services as well as by a lack of confidence in the market economy. In 1887, the Interstate Commerce Commission (ICC) was established, the first independent regulatory agency to be set up by Congress. Until 1935, the ICC regulated only railroads. In 1935, trucks and buses were included under ICC regulatory jurisdiction.

Independent agencies formed by Congress represented economic and social regulation of the marketplace. Growth in the number of independent regulatory agencies was partially caused by the way in which the economy functions. Free markets may function in a manner that appears chaotic and cruel, leading to calls for regulation of its effects on particular individuals or groups. Others believe that increases in the size of the pie brought about by the free market more than compensate for individual loss, and that minimum regulation is needed.

By the late 1970's, however, the movement to less regulation in transportation began to take shape. Deregulation began in the airline industry, and represented a bipartisan effort. The airline industry was deregulated in 1978. The Motor Carrier Act and the Staggers Act deregulated trucking and the railroads in 1980. In 1982, the Bus Regulatory Reform Act was passed to deregulate the intercity bus industry. Each of these acts has had an impact on its respective transportation industry, and each has affected the transportation available to rural areas.

Railroads Railroads were the first transportation sector to undergo deregulation. The Transportation Act of 1958 allowed the Interstate Commerce Commission greater

leeway in granting discontinuances of rail passenger service. Between 1958 and 1970, the number of passenger trains fell by 60 percent. By 1970, congressional concern for the shrinking intercity rail network led to the Rail Passenger Services Act of 1970. The act allowed railroads to terminate their passenger operations by turning them over to Amtrak, a federally subsidized corporation.

Since Amtrak assumed responsibility for rail passenger service, the system has grow very little in route-miles. However, improvements in rail service and aggressive pricing, backed by Federal subsidies, have resulted in increased rail ridership. Some States have encouraged the use of passenger rail in high-density commuter corridors Amtrak now serves more than 500 communities throughout the Nation.

Airlines In 1978, the Airline Deregulation Act liberalized airline exit requirements, with all but the last carrier in a market free to leave at will. From 1978 to 1983, the overall impact of airline deregulation has been an increase in both the number and convenience of flights.

Total domestic airline traffic has increased 40 percent since deregulation. Much of that increase has been in pleasure travel, which now accounts for almost 50 percent of total airline travel. Much of the increased travel is concentrated in major hub airports. Hubs are defined in this context as the number of enplanements or boardings. Tables 2a through 2d show boardings for hubs in the north central, northeast, southern, and western regions, respectively.

Although the number of flights has increased, service is offered to fewer communities. Airports serving large and medium-size cities had overall increases in flights of 20 percent or more, while departures from small communities rose by only 4 percent. Flight patterns for small communities also underwent modification as carriers adjusted both schedules and equipment to meet passenger demands. Small communities were served by commuter planes, sometimes on a reduced schedule, as airlines eliminated full-size jet service to small airports.

Recognizing that deregulation might have a harmful effect on rural areas, Congress instituted Essential Air Service (EAS) to maintain "a comprehensive and convenient system of continuous scheduled airline service for small communities and isolated areas, with direct Federal assistance where appropriate." The program maintains air service at small cities that have lost unsubsidized service following deregulation. Under the program, the Federal Government provides funds directly to the air carrier.

Nearly 150 communities nationwide receive assistance under the program. The subsidy per passenger ranges from $3 per passenger in Carlsbad, New Mexico, to $5l5 per passenger in Manitowoc, Wisconsin. Tables 3a-3d list the points served by State for the north central, northeast, southern, and western regions, respectively. The tables also provide information on total subsidy by State, the per-passenger subsidy at each point, and the subsidy as a percentage of fare.

Scheduled to terminate in 1988, the EAS program was extended for l0 years though

September 30, 1998. Under the extension provisions, certain new communities would be allowed to receive Federal subsidies to maintain service if they pay a portion of the fee.

Intercity Bus In 1982 the remaining passenger transportation system, the intercity bus industry, was deregulated by the Bus Regulatory Reform Act. Much like the rail industry, the ICC has liberal authority to grant bus companies permission to abandon unprofitable or marginal routes. Entry requirements for the provision of intercity bus regular route service are eased considerably. Any "fit, willing, and able" bus operator can enter the business unless it can be proved the service will not be in the public interest. The act largely pre-empts State jurisdiction over route abandonments so that States can no longer require bus companies to cross-subsidize rural routes with profits from routes in more populated areas or from charter and tour services. The act establishes a procedure for carriers to abandon or reduce routes within a State, but requires the carrier to seek relief first at the State level before going to the ICC. In many cases where the State attempted to mandate continuation of selected routes, the ICC overruled the State, allowing the carrier to abandon those routes if the carrier could prove they were unprofitable.

Because the bus industry was the last transportation sector to be deregulated, there were several differences in the effects of this deregulation. First, while the rail and air deregulation acts were somewhat cautious in requiring the ICC to consider the impact of abandonment on communities, the bus act directs the ICC to give priority to eliminating unprofitable routes and cross-subsidization wherever possible. Second, while Congress established Amtrak to ensure the continuation of a passenger rail network and initiated EAS to continue air service for small communities, no such program emerged for intercity bus transportation.

As a result, the net impact of the bus act on rural areas may be greater than the effect of the rail and air deregulation acts. Within a year of the act, 2,154 points had lost, or were slated to lose, some or all bus service. In a 1984 report, the ICC estimated that 1,045 communities losing service in the first year retained no alternative intercity service. In a September 1986 study, the ICC estimated that between enactment of the bus act in 1982 and January 1986, a nationwide total of 4,514 points had lost service, with 3,763 of these points losing all intercity bus service. The study also estimated that during the same period a total of 896 points had gained service. Small communities were the biggest losers—3,432 of the towns losing service had populations of 10,000 or under. This trend toward reduced service continues.

However, deregulation did not initiate a new trend of declining bus ridership. Rather, it accelerated a long-term, ongoing decline in bus ridership that had begun in the 1950's. In 1950, bus ridership represented 35 percent of public carrier passenger miles (rail, air, and bus). By 1970, bus passengers represented 18 percent of passenger miles, while by 1986, bus transportation had dropped to 6.9 percent of total public carrier passenger miles.

During the 30-year period before deregulation, intermodal competition with the automobile and the airlines had begun to erode intercity bus ridership. The mainstay of bus travel, the long-haul trip, was increasingly provided by airlines and private automobiles. Deregulation of the airlines and the advent of discounted fares further reduced the number of passengers using intercity buses for long-distance travel. The airlines competed directly with intercity buses in some locations as the fares between destinations were the same as, or even less than, bus fares.

Many of the points losing service after deregulation had produced little or no ridership. A simple numeric tabulation of points losing service does not reflect the true availability of service. A 1984 Indiana University study, conducted by Clinton Oster and others, found that of the 627 point terminations taking place between 1982 and 1984, there were 265 points (42 percent) receiving no regular (time point) service and another 109 points (17 percent) receiving less than 14 regular stops per week. These numbers suggest that the demand for service in nearly 60 percent of those points losing service was not sufficient to warrant regular service, or was insufficient to warrant one trip in each direction per day. Flag stop or highway stop service is generally provided when passenger boardings are so infrequent as to make scheduled stops inefficient. Sparsely populated rural areas that generate limited demand represented many flag stops. Many such points have moved from places deemed impractical for scheduled stops to being places economically impractical for intercity bus service.

Before deregulation, carriers had been required by the States to maintain service to many points with little or no ridership. Deregulation allowed the private carriers to discontinue such routes, permitting them to trim unprofitable routes and remain viable in the face of increased competition from the airlines.

The passenger transportation industry is currently in a transition period as the effects of deregulation are being worked out in the marketplace. Two aspects of that process are emerging as critical to the viability of individual firms.

The first process can be referred to as rationalization, or the adjustment of capital investment to rate of return. There is a substantial amount of invested capital with a long life throughout the industry. Planes have an average life of 20 years, the railroads have a large investment in track and equipment, and the bus industry has an outmoded terminal network. Vehicles used in the bus industry, however, are beginning to change as the industry responds to rural market conditions. Rather than using the traditional 47- passenger coach for all routes, the industry is beginning to use vans and is searching for local providers who can feed into the intercity network. Likewise, the industry is turning to alternate terminal arrangements which may not require ownership of facilities.

The second aspect is the freedom for management to make different guesses about the most appropriate strategy for their industry. An example is provided within the rail industry by the Burlington Northern (BN) and CSX Transportation (CSX). BN management sees the railroad as a wholesaler of railroad services while CSX sees

itself as a wholesaler and retailer of all transportation services. Each railroad is successful, each railroad demonstrates a different management decision about the most appropriate method of operating a railroad. Similar processes are at work in the airlines and in the bus industry as management attempts to match resources with market demand.

This brief review has described changes in the passenger transportation industry, providing some details on air service in rural areas. While air and rail are important components of the passenger transportation system, buses serve the most points throughout the United States and remain the most accessible mode of transportation for many rural areas. In fact, the only form of transportation available in more isolated rural areas is the intercity bus. Since the bus provides an essential linkage with other modes of transportation in rural areas, a more detailed analysis of intercity bus service in the rural areas of the north central, the northeast, the southern, and the western regions follows.

Bus Service Changes in the North Central Region: The north central region has lost bus service along with the rest of the country. In 1983, the Motor Carrier Ratemaking Study Commission found that 812 points had lost service, not including Wisconsin, which had deregulated before Federal action. Half of that service loss occurred immediately, with the remainder taking place over the following 3-year period. Table 4a lists service loss by State in the north central region.

To gain an understanding of how the service loss has affected individual States, three case studies are briefly described.

Between November 1975 and August 1986, 351 cities, towns, and villages in Illinois lost intercity bus service, with two points receiving new service. Two hundred-fifty of the points lost service after passage of the Federal act. In 1975, 93 out of 102 counties were on a bus route; by August 1986, only 62 out of the 102 counties retained service. The average population of an Illinois community with bus service increased from 8,231 to 12,705 during this period. Much of the loss was the elimination of flag stops: 37 percent of the loss was flag stops, and 17 percent was at points with scheduled arrival time. The only area demonstrating growth was bus service to O'Hare International Airport in Chicago.

In Michigan, despite creation of a State assistance program combined with State deregulation, a similar pattern of service loss has occurred. Regions especially affected are the northern part of the lower half of the State, the "thumb" region in the east, and the Upper Peninsula. From 1976 to 1987, the size of the Michigan route network dropped from 4,285 miles to 2,800 miles, a loss of 35 percent. Service over that network also declined, with 31,008 daily busmiles in 1976 to 18,609 busmiles in 1987, a drop of 40 percent. The ICC found that from December 1982 to January 1986 231 points in Michigan lost all service, a decrease of 35 percent. The losses are caused by a number of factors, one being the geography of the State. Michigan is a trip origin or destination State, but provides little through, or overhead, traffic to increase revenues. Second, Michigan strongly supports Amtrak services so that rail is

capturing some passengers who previously may have used intercity bus. Finally, the rural market is turning increasingly to automobiles or to local rural providers that serve special populations such as the elderly.

Nebraska lost less service than either Michigan or Illinois during the first wave of abandonment following deregulation. By 1983, Nebraska had lost service at 12 points and by 1986 the loss amounted to 45 points. The relatively low level of loss may be due to the State's location, which results in a preponderance of east-west through traffic. The second wave of abandonments, however, may have a greater impact. The first major loss came when Trailways decided to abandon its Omaha-Denver service and its connections to Kansas. At the same time, Black Hills Stage Lines filed to abandon the Norfolk-Rapid City, South Dakota, segment of its Omaha-Rapid City route. Strong citizen reaction to the proposal led the State to work with local groups to continue the route temporarily. An Urban Mass Transportation Administration (UMTA) Section 4(i) demonstration grant funded a study of the need for the service and options for continued service along with operating expenses for an additional year. The study was completed in December l987, and additional funds were appropriated in spring 1988 to fund the route until spring 1989. Meanwhile, Black Hills began operating the former Trailways route from Omaha to Denver in April 1987 without subsidies, so that service continues in that corridor.

Bus Service Changes in the Eastern Region: The 23 States included in the eastern region stretch from Maine to Louisiana. Intercity bus data presented here come primarily from *Russell's Official National Motor Coach Guide,* and so do not reflect service by carriers not publishing in the *Guide.* Tables 4b and 4c summarize service point changes for the Northeast and the South as listed by the Motor Carrier Ratemaking Study Commission and as estimated by the ICC in its 1986 study.

According to the ICC study, the Northeast lost 16 percent of the total national service point reductions, with the south losing 32 percent. The Northeast experienced 8 percent of the national gain in service points, while the South saw an increase of 18 percent. The ICC indicated that there are points "such as airports, prisons, military bases, local developments, restaurants, and road junctions" not usually assigned populations that account for 14 percent of the points losing service in the region. An examination of the data makes it clear, however, that points with less than 10,000 population have been most affected by the loss in intercity bus service. Seventy percent of the service point losses in the Northeast occurred in towns with populations under 10,000, with 78 percent of the southern region losses occurring in towns with less than 10,000 population.

Where there is sufficient demand, private carriers have entered the market in the East as in other parts of the country. A new private carrier now operates a van on a lengthy route in Maine formerly operated by Greyhound. Existing carriers have replaced routes in central and southern New England when a Trailways subsidiary withdrew from the area. Carriers have replaced Trailways service in over one-third of the States in the eastern region. Greyhound's franchising program has brought replacement service for Trailways in the southern part of the region, and has expanded service in some areas.

Bus Service Changes in the Western Region: The 13 states included in the western region range from Washington in the north to the Mexican border in the south and generally fall west of the Dakotas. Since deregulation, bus service as listed in *Russell's Official National Motor Coach Guide* has declined in the western region. Table 4d provides a summary of service point changes in the western region as listed by the Motor Carrier Ratemaking Study Commission and as estimated by the ICC in its 1986 study.

Texas lost the most service, with 222 points losing bus service between 1982 and 1986. California and Oklahoma, with 158 and 161 points lost, respectively, also saw drops in intercity service. As reflected in the national statistics, towns under 10,000 population saw the greatest decline in service: 74 percent of points losing service had populations under 10,000. However, in the western region, of the 330 points gaining service between November 1982 and January 1986, 200 were towns with populations of under 10,000.

Changes in intercity bus service are taking place within the context of a general modification of passenger transportation in the western region. Transportation in the western region is characterized by long distances, high speeds, excellent highways, concentration of interstate traffic on a few high-traffic corridors, and a high level of private vehicle ownership and use. In recent years, changes have occurred not only within the intercity bus network but also in passenger transportation costs, mixed mode opportunities, and system users. In the discussion that follows, California serves as an example of some of the trends taking place in the western region.

The greatest change in regular route service has occurred in service frequency. On average, service has declined about 10 percent per year since 1982. However, the total volume of bus traffic has remained steady, reflecting the growth in the charter and tour business.

Since deregulation, the cost to the user has declined as competition for passengers has increased. Before deregulation, major bus companies did not perform route-by-route, detailed cost analyses, but relied instead on regional aggregated costs. Their focus was the end-of-year, "bottom line" financial statement. Today, those costs are known and bus companies are becoming increasingly competitive, especially in the area of contract transportation and charters.

The bus act permitted mixing of charter, contract, and regular route (per capita) passengers in the same coaches, thus providing the bus industry with opportunities to offer mixed mode services. An example is the feeder transportation system contracted out by Amtrak. In seeking cost-effective feeder bus services to trains, Amtrak has contracted for mixed-mode bus feeder transportation across the sparsely populated Mojave Desert between Bakersfield and Barstow, California. A contract with the regular route carrier over the same route resulted in a substantial savings in cost when compared to exclusive service on the same corridor. The mixed-mode arrangement ensured better bus load factors and utilization. It also resulted in better schedules for bus passengers as well as train feeder passengers.

The caveat to bear in mind when discussing rural intercity passenger ridership is that each route must be examined in detail. Studies conducted in other locations or in other time periods should not be used to design service, since patronage may be seriously misjudged.

In general, deregulation has improved service levels and reduced fares for the Nation's transportation system as a whole. While the benefits nationally outweigh the costs, those costs are falling disproportionately on small communities and rural areas. On a national scale, the magnitude of these costs is relatively small, but they are significant to those rural areas losing their transportation service.

The Cumulative Impact of Deregulation on the Viability of Rural Communities

In assessing the impact of deregulation on rural communities, it is not enough to examine the effect of each deregulation act separately. Such an assessment can provide at best only a partial perspective on deregulation. Rather, it is necessary to evaluate the cumulative impact of deregulation on rural areas. That evaluation, however, requires more than a look at statistics describing service losses and gains by transportation industry: Sufficient time has passed since deregulation began to initiate a preliminary analysis of overall impact.

The impact of deregulation is not over: Rail, air, and bus deregulation are still taking place. The airline industry remains in a state of flux generally. Rail line abandonments continue, with Amtrak facing threatened loss of federal funds on an annual basis. Small communities continue to experience loss of bus service as further reductions of unprofitable or marginal routes occur.

However, while the passenger transportation industry is adjusting to a deregulated environment, it is possible to begin a preliminary review of the impact of deregulation on rural communities. Three general categories should be considered: The impact of deregulation on rural residents, its effect on rural business, and its effect on the community.

Many rural residents no longer have intercity public transportation available to them: It is no longer possible "to get from here to there." The combined effect of rail, air, and bus deregulation has simply removed many rural areas from the intercity transportation network. In those small communities where some form of intercity transportation is still available, the cost of travel has risen, sometimes dramatically. Increases in intrastate fares after deregulation have increased travel costs for many rural riders. A 1982 Federal study showed that the average cost of flying out of a small town after deregulation had risen an average of 16 percent since 1978. A recent study conducted by Mary Kihl in Iowa demonstrated that basic coach fares from small midwestern hubs to major national locations have gone up an average of about 150 percent since deregulation, with the sharpest increases taking place in the shorter connections. While discounted fares can reduce those costs, discounts are not as available for flights from smaller airports as they are from large hubs.

Alternately, if intercity transportation is available, the inconvenience involved in making connections discourages people from making a trip. Excessive time spent in layovers, for example, can extend a 1-day trip to a 2-day event, an extension requiring not only time but additional money for an overnight stay.

The net result for many rural residents is increased isolation from society at large, as linking with other communities becomes more and more difficult. An alternative for some elderly people is to move away from their homes in rural areas to an urban area—where they no longer have the support of their local community network and where they may require the support of human services agencies to remain independent.

The rural business community also is feeling the effects of deregulation. Loss of rail service may lead to increased costs as local business turns to the trucking industry to move goods and as the community has to build roads and bridges to higher standards to accommodate trucks. Loss of air service can mean a community will not be considered as a potential plant site, thereby reducing the continued economic viability of the community. Or, a local business may relocate to an area that does offer air service. The loss of bus service can also affect local business, particularly those firms depending on the small package delivery service offered by interstate bus companies.

While the effects of deregulation on rural areas remain largely anecdotal, it appears there may be an incremental addition to a larger trend toward increased isolation and rising costs for rural communities. As costs rise, businesses close, thereby reducing the number of services available locally. And as the number of services decline, residents are forced to travel farther to access medical care, shopping, employment opportunities, and social and recreational outlets. As people travel to meet basic needs, the cycle of decline is reinforced as individuals combine their trips to the larger community to include the doctor, the shopping center, and the theater—and bypass the local business as an additional, unnecessary stop. Eventually, population declines as access to basic services becomes too difficult or too costly for rural residents to sustain.

Rural Mobility After Deregulation: New Roles for Government and the Private Sector

While preliminary reports indicate that deregulation has resulted in many small communities losing rail, air, or bus service, there are also signs that rural transportation options are being developed throughout the country. Before reviewing those options, a description of the statutory and financial constraints surrounding passenger transportation provides the context for developing new approaches to rural mobility.

In developing solutions for rural passenger transportation, State and local governments have encountered significant statutory and financial constraints that have limited their ability to provide transportation services.

A primary constraint is in Federal regulations governing the use of funding for human service programs. The Department of Health and Human Services (HHS) spends over $1 billion annually on transportation of its clients who are involved in programs such as Headstart, Medicaid, and the Agency on Aging. Since at least some of its clients are eligible for more than one program and can receive transportation services for each of those programs, there tends to be duplication and overlapping. Efforts to coordinate transportation, however, have encountered regulations that prohibit the use of program-specific funds to transport clients eligible for other human service programs. Vehicles purchased with Section 16(b)(2) funds, for example, can only be used for transportation of elderly and handicapped. Given shrinking transportation resources in rural areas, such barriers can restrict transportation options for rural residents.

Recognizing the serious limitations such regulations place on transportation, the U.S. Departments of Transportation and Health and Human Services (HHS) signed an interagency agreement establishing a Joint Coordinating Council on Human Service Transportation during the fall of 1986. The council's objective is to ensure that the policies and requirements of the two departments promote the most efficient and effective use of Federal funds spent on specialized and human service transportation. The council has met several times and is currently working with the States to ascertain which barriers are most restrictive as part of a long-range effort to eliminate the most serious barriers to coordination. USDA's Office of Transportation and the Veteran's Administration have been invited to join the coordinating council.

State statutes also may limit a State's ability to address rural intercity passenger transportation. State laws may prevent, for example, offering operating subsidies to private carriers to maintain intercity bus routes. Without those subsidies, the carrier most likely will win ICC approval to abandon unprofitable routes.

Differences in statutes between adjoining States may prevent their cooperation in maintaining interstate passenger transportation systems that link the two States. Local governments working to continue intercity bus transportation may encounter similar difficulties, since they can only address the portion of an intercity route that lies within their jurisdiction. Statutory and jurisdictional differences can block continuation of intercity bus transportation if the responsible governmental units cannot develop a working partnership.

Federal Funding for Rural Passenger Transportation

Rural passenger transportation is funded through a variety of sources at the Federal, State, and local level. A brief summary of some of the major funding sources follows.

Federal funding for rural passenger transportation is channeled through the U.S. Department of Transportation's Urban Mass Transportation Administration (UMTA). Although the name includes the term "urban," the goal of UMTA is "Transit opportunities for all Americans." This goal includes rural areas.

Rural transit is very different from urban transit in several ways. Urban transit is often extremely capital intensive, while rural transit has less capital invested in facilities. Rural transit is diverse, with over l,000 agencies delivering over 172 million trips annually. Rural transportation is generally demand-based local service, often with a focus on service to elderly, handicapped, and otherwise disadvantaged persons. Rural transit tends to be efficient, serving its passengers with smaller vehicles, more flexible scheduling, and lower costs. Rural transportation is often a life-line service, providing links to jobs, meals, essential services, and hospitals. Public rural transit is often the only way for rural residents without access to private vehicles to avoid isolation.

UMTA provides assistance for rural passenger transportation through two programs—the Section 18 program and the Section 16(b)(2) program. Both programs are managed through the States, with funds allocated to each State on a formula basis.

Section 18 of the Urban Mass Transportation Act of 1964, "Public Transportation for Nonurbanized Areas," is directed at improving, initiating, or continuing public transportation service in rural areas. Funding may be used to cover specified capital expenses, project administration, and operating expenses to provide efficient and coordinated service in rural areas. Section 18 monies can be made available by the States for intercity passenger transportation, but those funds are very limited. Most States have committed virtually all available Section 18 monies to small city and rural public transportation, and have developed rural public transportation systems that are meeting many of the local or regional mobility needs formerly met by intercity bus carriers.

The Section 16(b)(2) program can only be used to provide vehicles to private, nonprofit organizations for transportation of the elderly and the handicapped. Funds cannot be used to provide operating assistance or cover administrative expenses.

Tables 5a to 5d present a summary, by State, of the number of agencies by type and the number of vehicles operated in rural public transportation for the north central, northeast, southern, and western regions, respectively. In the north central region, some 1,300 agencies operate 6,972 vehicles. In the Northeast, nearly 800 agencies operate 7,320 vehicles, while in the South, more than 1,000 agencies operate 8,578 vehicles. In the West, more than 1,200 agencies operate 8,612 vehicles. Since Section 18 provides funding for rural and small urban systems, the Section 18 agencies are serving rural needs. Section 16(b)(2) vehicles serve the elderly and handicapped in both urban and rural areas. It is evident upon reviewing Tables 5a to 5d that some rural mobility needs are being met through local rural public transportation systems.

Tables 6a to 6d display State and Federal funding that provides operating and capital support for these rural public systems. As can be seen, a considerable amount of funding is provided for local rural systems throughout the country. Total funding in the north central region equaled $61,453,000, with the States contributing $22,151,000. In the Northeast, annual funding for fiscal year (FY) 1986 amounted to $27,508,718, with 70 percent of the monies from State and local sources. In the South, annual funding for FY 1986 came to a total of $37,870,881, with the State and local share accounting for 52 percent. In the West, total funding came to $40,460,892, with the State and local contribution being $25,647,921. The tables also indicate that Connecticut, Delaware, Maine, Massachusetts, New York, Pennsylvania, Rhode Island, Michigan, and California contributed State funds for intercity bus transportation.

Funding for rural transit should be evaluated within the context of overall budget reductions. The Administration's budget for FY 1989 proposes a reduction in UMTA's budget from $3.28 billion to $1.52 billion. Under this budget, operating assistance would be eliminated for areas over 200,000 in population and the Section 3 discretionary program would be eliminated. Long-term transportation funding trends will take into consideration the budget deficit, the Federal Aviation Administration's efforts to maintain the air traffic control system and improve aviation safety, and the growing awareness of transportation efficiency issues, particularly those in large areas.

Within the overall funding context, rural areas seem to have held their own. The Section 18 program request for FY 1989 is for $67 million, up from $64.6 million in FY 1988. The Section 16(b)(2) request is for $35 million, the same as FY 1988.

In addition to funding rural transit, UMTA has initiated several other activities to assist rural passenger transportation. These initiatives include the Greyhound/Rural America project, training workshops for rural providers, coordination of transportation funding/ programs mentioned earlier, and the entrepreneurial services program.

UMTA is funding the Greyhound/Rural America project to facilitate the Rural Connector program. Under this program, rural providers will link into the Greyhound intercity network. Rural providers will coordinate their schedules with Greyhound to allow their riders to use the intercity system. Greyhound and rural providers will develop joint ticketing arrangements to allow passengers to purchase one ticket for a through trip on both systems. Through the Rural America grant, the program will be initiated in the States of Missouri, Iowa, Nebraska, Kansas, Indiana, Illinois, Minnesota, Colorado, Oklahoma, Mississippi, Arkansas, Louisiana, Florida, and Georgia.

Under the auspices of the National Association for Transportation Alternatives (NASTA) and the International Taxicab Association (ITA), UMTA is conducting a series of four workshops on contracting for rural and small urban transit. Because monies are available in rural areas to transport human services clientele and other specialized populations, the workshops will develop a better understanding about the opportunities for public-private cooperation in rural transit.

The Entrepreneurial Services program of UMTA provides assistance to entrepreneurs interested in establishing self-supporting service for market research, planning, and startup costs. Funded at $5 million, the program provides grants to transportation entrepreneurs to meet currently unsatisfied transit needs. Applicants identify transit routes—such as commuting, reverse commute, and circulation service—that are not currently being served. The program provides startup monies for projects that will become self supporting or can develop funding sponsorship. While the program has not focused on rural transportation, UMTA is encouraging rural providers to apply for grants. One possible area for funding is feeder service to intercity routes.

In summary, Federal funds are available for rural transportation, but they are limited, both in amount and in the purposes for which they may be used. Section 18 monies can be made available by the States for intercity passenger transportation, but those funds are very limited. In addition, since most States have committed virtually all funding to small city and rural public transportation, the Section 18 allotment is fully utilized. Other Federal funding sources, such as Section 16(b)2, can only be used to provide vehicles to private,nonprofit organizations for transportation of the elderly and the handicapped. No Federal monies are specifically earmarked for intercity bus passenger transportation, while EAS funds provide small communities with limited air service and 403(b) funds assist States in maintaining intercity rail passenger service.

State Assistance for Intercity Passenger Transportation

States provide funding for intercity bus service, with funding increasing from $15 million in FY 1985 to $20.4 million in FY 1987. There is considerable variety among the States in the type of service provided, with some funding commuter trips and others targeting rural and small town service. Programs range from funding operating expenses to providing capital equipment or terminals. In some States, programs are part of general transportation assistance, while in others, programs are specifically designated as intercity transportation.

In the north central region, Michigan and Wisconsin provide funding for intercity bus transportation. Table 6a indicates that Michigan contributes State funds while Wisconsin allocates Section 18 monies to intercity transportation.

Michigan's involvement in intercity passenger transportation dates to the late 1970's when a loan pool was created for carriers to purchase buses at lower interest rates. The program also involves intermodal terminal construction, with the State cost per terminal ranging from $75,000 to $3 million. Funds for the program come from a portion of the State gas tax dedicated to transit.

Wisconsin provides funding for intercity routes under the Section 18 Program. Seven intercity routes are currently being assisted, including four Greyhound routes and three small systems. The FY 1988 Federal share of the assistance totaled $363,000. Wisconsin has provided funding for intercity bus transportation longer than any other State, and has allocated the largest portion of Section 18 funds to intercity transportation.

In the East, Delaware, Maine, Massachusetts, New York, Pennsylvania, and Rhode Island provide funding for intercity bus transportation. Tables 4b and 4c list the amounts by State for FY 1987. Several of these States have programs that encompass more than operating costs.

Massachusetts has established a $10 million bond fund program for capital assistance known as the Intercity Bus Capital Assistance Program. The State purchases buses and leases them to participating carriers at a 50-percent cost savings for a 7-year period. The original purchase included prototype lift-equipped buses to determine their feasibility and usage within the intercity system. Since preliminary results were favorable, all 22 buses included in the latest purchase are lift equipped.

New Jersey uses Federal and State funds to purchase coaches that are leased to private carriers for $1 per year. Most of the New Jersey buses are used for commuter service to New York City.

New York provides the largest amount of State support for operating assistance to intercity carriers, funding approximately $7.2 million statewide in 1986. The State's Department of Transportation has directly assisted nine major intercity carriers, negotiating prices directly with carriers. The State is currently reviewing its intercity program to define more precisely the basic intercity network necessary to link all portions of the State.

North Carolina began intercity bus and rail programs in 1980. Funding sources include State general funds, 403(b), carrier funds, and Section 18. The State is using oil overcharge funds to advertise intercity services.

Since passage of "Act 10 of 1976," Pennsylvania has been a leader in supporting intercity bus travel. The State's Department of Transportation has provided technical assistance to intercity providers since 1977. Most of the State's monies have been for operating assistance, with the State providing $4 million in operating funds between 1977 and 1985.

In the western region, California provides funding to localities for intercity buses. Localities then determine how the funding is allocated. Fixed-route, regularly scheduled service is currently provided by 73 intercity bus carriers, with 50 of those 73 operations publicly owned or operated. The system covers 16,000 route-miles.

California also has provided funding for intercity rail since 1975. In 1979, the State began a major multiyear, rail passenger funding program. Amtrak presently operates six routes, with the California Department of Transportation sponsoring 403(b) service on two of those routes. The two subsidized routes are the San Joaquins and the San Diegans.

Oregon is actively working in intercity passenger transportation. During the early 1980's, major bus lines dropped service in Grant County. A joint effort involving the Chamber of Commerce, the county, senior citizens, and the State led to the

establishment of new service in February 1988, called the "People Mover." Financed by State monies and some Federal Section 18 funds, the service uses 12-passenger vans to connect with major bus routes in central Oregon.

Rural Mobility: The Public-Private Approach

State and Federal funds for rural intercity passenger transportation are limited. Because of this funding constraint, the regional symposiums looked at examples of alternate strategies for delivering transportation services in rural areas. The strategies presented were identified by regional rural transportation leaders as creative approaches that maximized the use of limited public and private resources: They are not necessarily typical of transportation services offered to rural residents. Rather, the strategies serve as examples of the variety of responses being developed to meet rural transportation need and indicate that creative programs can be tailored to meet particular local needs.

When examining alternative methods for providing rural passenger transportation, several factors need to be considered. It is important to distinguish between need and demand. While studies may demonstrate transportation need based on proportion of community residents having user characteristics, that need may not indicate the level of actual demand for transportation service. The cost of providing service must be a consideration when determining whether rural passenger service should be continued or subsidized as low density areas may not generate sufficient profits to merit continued private operation of rural routes. Finally, limited funding necessitates the involvement and support of the community if transportation service is to be continued in their area.

Private carriers today are recognizing that new approaches are necessary to retain many rural intercity routes. As a result, carriers are beginning to experiment with a variety of methods to ensure continued intercity bus service. The solutions developed by carriers, described below, were presented at the three regional symposiums. Greyhound Lines, Inc., presented its Rural Connection program at each symposium, but it is described only as part of the north central region.

North Central Region

Greyhound—The Rural Connection Since Greyhound has been under a new management team committed to redeveloping America's intercity bus network, it recognized the major challenges facing any carrier providing transportation for rural residents, and is attempting to expand overall awareness and utilization of bus transportation throughout the country. An important part of that attempt is the ICC approval of Greyhound's takeover of the Trailways intercity bus network in May 1988, an action that leaves in place a national intercity bus network.

Greyhound is now in the process of implementing a variety of changes for the intercity bus industry. These changes include improved terminal facilities, better service quality, and realistic and competitive structures. The company also is actively participating in improvements in urban transportation through the provision of high-quality, cost-effective operation of transit services on both a contract-management and a turnkey basis.

Greyhound is addressing the challenges of rural intercity passenger transportation with a service that is more passenger oriented, more flexible, and more aware of its interdependency with rural public transportation providers. In the past, potential solutions to some of the challenges in rural areas—such as organized scheduling interfaces or full interline agreements—have been perceived as cost prohibitive and too complicated. As a result, most rural transportation providers have not been able to link their services with intercity carriers.

Greyhound is operating under the premise that restoration of intercity transportation to rural communities is essential. Neither the intercity carriers nor the rural providers can restore service alone because of financial and operational barriers. Only a partnership between the two, which effectively links passengers in rural areas with high-density intercity routes, can restore a national intercity bus network.

The Greyhound Rural Connection has been designed to foster that partnership. It consists of two components: (1) the establishment of a feeder service for passengers and/or packages and (2) the involvement of rural providers as commission agents.

The feeder service is initiated by matching the existing schedules of a rural provider with those of the intercity carrier within the provider's service area. The schedules are prepared for inclusion in *Russell's Guide* and other local marketing materials. A simple operating and bus terminal license agreement can then be executed between the rural provider and intercity carrier to begin the service. Under the agreement, the rural provider receives a commission for each package or passenger delivered to a designated bus station.

The second program component involves the rural provider as the commission agent in an area, with the provider becoming the sales agent for the intercity carrier(s) serving that area. In doing so, the rural provider receives a commission for every passenger and package ticket sold for the carrier(s). A standard commission agent agreement can be executed between the parties to begin service.

Marketing is key to the success of both the feeder service and the commission agent programs. To ensure that both services are adequately promoted, Greyhound is engaging in a concentrated marketing effort in conjunction with the rural providers. Although the intercity carrier is generally in a better financial position to support marketing activities, the rural provider must implement the effort at the local level where the ridership is located. Concerned with excessive paperwork for the rural provider, Greyhound is developing marketing campaigns that are simple in execution, but comprehensive enough to convey the appropriate message. So far, the most effective marketing tools have been fliers, newspaper and radio advertisements, and brochures. Community support for the marketing effort also is being sought by both Greyhound and the rural providers. Other program components include training of rural providers by Greyhound and participation in a vehicle-leasing program.

Beginning in late 1987, Greyhound initiated one or both types of service in several States, including Tennessee, Virginia, North Carolina, Texas, Ohio, Wisconsin,

Alabama, and South Carolina. Services are scheduled for implementation in the near future in Kentucky, Michigan, and New York. During the remainder of 1988 and the first quarter of 1989, Greyhound expects to begin negotiations in cooperation with Rural America in Missouri, Iowa, Nebraska, Kansas, Indiana, Illinois, Minnesota, Colorado, Oklahoma, Mississippi, Arkanas, Louisiana, Florida, and Georgia.

While Greyhound feels these efforts are necessary for company growth, they are convinced other intercity carriers also can benefit from both the feeder service arrangement and the commission agent approach. An example is provided in Texas, where the Kerrville Bus Company is a full partner in the program with both Greyhound and the Capital Area Rural Transportation System (CARTS). In North Carolina, Greyhound and Carolina Trailways will be working together as services are expanded to additional rural providers. As the program extends into other States, Greyhound intends to seek the involvement of interested intercity carriers. Such involvement and cooperation will ensure both the highest level of service possible for intercity bus customers and long-term success for the program.

To ensure that the Rural Connection program receives adequate and appropriate attention, Greyhound has added staff with experience in providing local rural passenger transportation. Greyhound has emphasized its concern for meeting the needs of each area being served by the program, and has initiated each State program with a hands-on approach.

Jefferson Lines—Community Awareness Initiative Jefferson Lines, Inc., is a regional bus company serving the Midwestern portion of the country from Minnesota to Oklahoma. Its Community Awareness Initiative is Jefferson's approach to increase ridership and, in doing so, to improve service. Emphasizing that the public must be convinced that bus travel is important, Jefferson developed five basic premises under which they operated after deregulation. First, the adversarial relationship between regulators, transportation agencies, and the industry had to end. Second, all the interested groups needed to work together rather than at cross-purposes. Third, each carrier needed to generate business without relying on government or outside assistance. Fourth, after adjusting to the changed economic environment brought about by deregulation, business would improve. Fifth, people were for the most part unaware of services provided by the bus companies.

In developing a program to continue service within a deregulated environment, Jefferson assumed there would be no subsidies. They also recognized that they needed a "partner with staying power," or someone with whom they could share the responsibility of providing bus service. Jefferson's Community Awareness Initiative program began in 1985.

The Community Awareness Initiative is a process whereby Jefferson generates local support for, and participation in, providing intercity bus transportation. Jefferson visits, community by community, the areas where it currently provides bus service. Jefferson representatives meet with town officials to discuss the ways in which the local community can carry out community awareness. Town meetings are scheduled to

discuss how the community can work together to preserve and maintain current levels of intercity bus service. Town meetings are suggested to include local organizations such as newspapers, Chambers of Commerce, senior centers, colleges, service clubs, and potential distribution networks such as banks and power companies.

A major portion of the Community Awareness Initiative involves development of public service announcements that provide information on schedules, bus depot hours, locations, and telephone numbers. Further community participation includes placement of promotional material such as bus schedules, posters, tour brochures, special promotions, and news items. Distribution points include senior centers, colleges, travel agents, malls/shopping centers, and other public areas.

Lists of area organizations and businesses are developed for use in increasing awareness among organization members. Jefferson Lines gives presentations to community groups, emphasizing the need for community cooperation with the bus company to ensure continued bus service. Through its work with communities, Jefferson fosters community awareness of bus service and of how that service enhances local business and the quality of life. The communities along the bus lines also become sensitized to the importance of their participation in retaining bus service.

Arrow Stage Lines—Intercity Routes in Low-Density Rural Areas In Nebraska and South Dakota, Arrow Stage Lines is a regional bus line faced with a dilemma common to many bus operators: Lack of sufficient passengers to generate a reasonable profit. The company, which operates a route from Omaha, Nebraska, to Rapid City, South Dakota, saw ridership decline during the early 1980's when the area experienced an economic downturn. Plans to abandon the line led to a special, 1-year program funded by U.S. DOT's Urban Mass Transportation Administration to continue the service while alternatives could be developed.

Threatened loss of service led to the formation of a local "Save the Bus Committee," a group reformed from an original "Save the Rail Committee" that had attempted to retain rail service through many of the same communities in 1962. As a result of committee efforts, UMTA funded a study in 1987 to examine transportation options available to the area.

Study results indicated that the bus line was losing $114,000 per year. Ridership per day was approximately 37-38 passengers, or a total of approximately 10,000 per year. The farebox covered 53 percent of costs, comparing favorably with the 35 percent of costs covered by farebox revenues in urban transportation systems. If the service is abandoned, 5,500 riders per year will be affected, with 1,300 of those riders unable to make the trip at all.

Options available to the area include: Discontinuing the service when funding ends; using smaller vehicles; reducing frequency; using smaller vehicles and reducing frequency; developing a program to fund existing service; or funding a service using smaller vehicles and lower frequency. The advisory committee favors the development of a publicly supported program to fund existing service. The long-term

source of funding is expected to be both State and local, but no details have yet been developed.

Eastern Region

Vermont Transit Co.—Regional Bus Service Vermont Transit Co., is a regional bus line headquartered in Burlington, Vermont, and operating regular route service between Burlington, Vermont, Albany, New York, Springfield, Massachusetts, and Portland, Maine. The company maintains terminals at Burlington and White River Junction in Vermont and shares terminals at Boston, Springfield, Albany, and Portland. Commissioned agencies throughout the system sell tickets and handle packages, while some small villages and towns maintain only flag stops.

Since the company began 60 years ago, considerable changes have occurred within the intercity bus industry. The major, long-term trend is toward reduced ridership of intercity buses. As the number of passengers declines, a cycle emerges that reduces the number of trips available to remaining passengers: Fares must then increase to cover costs. Further reductions in passengers take place in response to fare increases, and the cycle begins anew. In fact, the number of regular route Vermont Transit passengers declined by 25 percent between 1972 and 1987.

A second factor reducing intercity bus usage is deregulation of the airline industry. Discount fare airlines cut into the traditional bus market by discounting long-distance trips. Bus passengers turned to the airlines to travel routes competitively priced with intercity bus service. Most of those passengers have been permanently lost to the airlines.

To generate revenues necessary to provide continuing regular route service to rural areas, Vermont Transit has turned to package express, intermodal connections, van service, airport service, commuter service, and tailoring regular route service to local travel demands.

Vermont Transit aggressively markets its package express service, with a sales staff of three people focusing exclusively on selling package express. They have developed a network that carries bank work, auto parts, interoffice communications, payrolls, and the Vermont/New Hampshire regional blood service. In some locations, Vermont Transit has established pickup and delivery service so the customer doesn't have to leave the office to ship or receive a package. Primary passenger routes move north and south through Vermont, but the package and express delivery system runs east and west and connects with the north-south bus line. As a result, Vermont Transit is the quickest method of delivery service to business in those areas.

Development of the package express service in very sparsely populated areas has enabled the company to generate revenue of approximately 38 cents per mile throughout the system, so that the revenues come close to paying the out-of-pocket expenses of operating a bus. In 1984, package express revenue amounted to approximately $900,000; it rose to $1,350,000 by 1987, an increase of 50 percent.

Many Vermont colleges are located in isolated locations difficult to get to without a car. The only means of public transportation is Vermont Transit. The company provides service at strategic times during the school year, with the service often provided by vans. If the students are going a considerable distance, they usually feed into an intercity bus route.

In fact, Vermont Transit relies heavily on van services to feed its regular routes. If the company would attempt to operate standard intercity coaches over its entire route, at least 25 percent of the system would have to be closed down. The passenger traffic and population figures simply do not support a full-size coach. However, operating an 11-passenger van is financially viable, as both the cost of the vehicle and the operating and labor costs are substantially lower. Utilizing vans allows the company to operate service twice a day to Lyndonville, Vermont, a town with a population of 1,400, as well as to the town of Bradford, which has a population of 800.

Intermodal connections also have begun to gain attention, as most intercity bus trips involve several modes. In keeping with that trend, Vermont Transit initiated ferry service from Burlington, Vermont, to Plattsburgh, New York. Burlington is 12 miles from Plattsburgh across Lake Champlain. The service was established to serve the regular route bus system at Burlington, to serve Burlington International Airport, and to serve the Medical Center Hospital of Vermont, which is frequently used by people living in northern New York.

The ferry service began in 1984 and generated significant usage—until the initial marketing effort declined. Vermont Transit has reinstituted vigorous marketing, and is waiting to see whether this will again attract passengers. The important aspect of the ferry service is that it feeds people into the regular route bus system, a system that would not be financially viable without package express and the van service.

Airport service is evolving into an important component of overall bus service. At Boston, almost every regular route trip serving the Greyhound terminal goes on to Logan Airport. Northbound trips originate at the airport, go to the Greyhound terminal, and then head north. Approximately 15 percent of the passengers traveling to and from Boston go to Logan Airport. In Burlington, Vermont Transit has established its own ticket counter at the airport, and many of the regular route trips to and from Burlington also serve the airport. Recognizing that airport service can be profitable, the company makes every effort to attract airline passengers to use their service to and from the airport.

In response to the loss of long-haul passengers to the airlines, Vermont Transit has localized its service. It has gone back to some of the smaller towns and found that more and more of the passengers are traveling relatively short distances between two very small towns. For example, a Friday afternoon bus traveling Route 7 out of Burlington will leave full. By the time the bus travels approximately 85 miles to Danby, Vermont, the bus will again be full, but less than half of those passengers will be the same ones who left Burlington. Many college students who are Vermont residents

have traveled from Burlington to points between Burlington and Danby. Their replacements are likely to be people headed for New York City for the weekend.

In February 1988, Vermont Transit started a commuter service from Nashua, New Hampshire, to Boston, Massachusetts, a distance of approximately 47 miles. The company has seen a steady rise in passengers and expects a substantial increase in the near future. It has applied for a grant to publicize the operation through the UMTA's Entrepreneurial Services program. UMTA would provide a one-time grant to publicize and market the service so it can be developed into a self-sufficient, profit-making venture.

Further opportunities exist in rural passenger transportation. Vermont Transit is beginning to search for partners who already operate smaller vehicles in rural areas and who can feed into regular intercity routes. Section 18 recipients represent potential partners to link into intercity bus routes. Stagecoach, a provider in Randolph, Vermont, and Vermont Transit are discussing linking routes to provide rural residents access to intercity destinations. A second program generating interest is Jefferson Lines' community participation program, an initiative which involves community support of the intercity bus carrier.

Salisbury Taxi Company—Rural Community Service The City of Salisbury, Maryland, is the "hub" of the Lower Eastern Shore. Outlying communities utilize Salisbury for their medical, shopping, banking, entertainment, transportation, and employment needs. The population of Wicomico County, Maryland, including Salisbury, is 70,000 and growing rapidly. A 1987 community audit estimates that 325,000 people currently shop in Salisbury/Wicomico retail markets. With a high level of population growth, private automobiles alone cannot be expected to meet future transit requirements. As a result, the Wicomico County Council commissioned a study in 1987 to update the county transportation development plan. Possible recommendations include consolidating the area's local transit operations into one transportation unit, and securing a Section 18 grant to fund a public transportation system that combines the resources of the private and the public sectors.

Salisbury is served by a variety of transportation facilities, with a regional airport, rail service, and the intersection of two major highway systems, Routes 13 and 50. Two attempts to establish a public bus system, however, have not succeeded. The city of Salisbury has no public bus system, with taxis providing the only public transportation available in the county.

Salisbury Taxi is the area's largest taxi company, currently operating 15 vehicles 24 hours a day, 7 days a week, and transporting 500 passengers per day. Each taxi averages 1,000 miles per week.

The taxi industry on the Eastern Shore suffered major setbacks during the 1960's, 70's, and 80's. The rapid rise in gasoline prices and the rise in insurance costs have threatened the existence of taxicab firms. However, an increase in publicly funded transportation programs during the 1970's has had the most impact on taxicab

companies. Many of the riders who now receive transportation provided by human service agency programs used local taxicabs before transportation was available through government programs.

In some instances, taxi companies can provide a less costly alternative to agency-operated transportation. As a result, the taxi industry has begun to contract with smaller human service agencies to transport their clients. Salisbury Taxi has devised various ways of reducing costs. One method is to load vehicles with riders from several programs who are going to the same destinations, thus fully utilizing vehicle capacities. A second method is utilization of the "hub" system used by the airlines. Since Salisbury is the "hub" of the Lower Eastern Shore, Salisbury Taxi uses its central location in routing rides. By sending their vehicles out to neighboring communities and by combining their vehicles with cooperating human service agencies, they have been able to create a network that maximizes efficiency.

Salisbury Taxi works with an affiliate organization, Eastern Shore Human Services (ESHS), which provides transportation for human services clients exclusively. ESHS operates 15 vehicles, including three wheelchair lift vans. They have major contracts with Maryland Medical Assistance; Delaware Medical Assistance; Wicomico, Somerset, and Worcester Counties; the Kidney Foundation; the Easter Seals Society; several hospitals; and various private companies. ESHS shares facilities with Salisbury Taxi, which allows them to offer 24-hour, 7-day service. Sharing facilities also enables ESHS to have one of the lowest operating rates in Maryland. Aggressive marketing, backed up with good service, are the keys to the success of ESHS.

While publicly funded transportation in Wicomico County is currently in a flux, Salisbury Taxi is the primary provider of public transportation for both the city of Salisbury and outlying, rural communities. By providing transportation for human service agencies, the company in effect is taking on a larger, public transportation role. Although the company is a private corporation, it is also cooperating/contracting with public organizations in providing transportation services. As such, it presents an alternative model for use in rural communities where public transit is not available.

Peter Pan Bus Lines, Inc.—Intermodal Linkages By definition, intermodal touches upon almost all discussions involving transportation. Virtually all intercity trips are intermodal, with passengers using cars or taxis to get to and from the bus or rail station or the airport. Given the downward trend in intercity passengers, intercity carriers are beginning to capitalize on the intermodal nature of intercity travel to expand revenues. Peter Pan Bus Lines is involved in several intermodal services, each serving a different market niche.

Peter Pan is under contract with Amtrak to run buses between Springfield, Massachusetts, and Montreal, Canada. The deteriorated track condition between Springfield and Montreal would require Amtrak to operate passenger rail service at unacceptably slow speeds. Consequently, Amtrak has contracted with Peter Pan to transport Amtrak passengers between Springfield and Montreal, making stops in Vermont. The contract will continue until the track is repaired.

A growing example of intermodal connections is airport service. With congestion increasing at all major airports, curb space to accommodate passenger dropoff and pickup is at a premium. Some of that congestion can be eliminated by substituting buses or vans for private automobiles. Logan Airport, for example, is served by 25 bus carriers. Peter Pan is one of those carriers. It is under contract with the Massachusetts Port Authority (MASSPORT) to provide service from Framingham, a city approximately 12 miles from Boston, to Logan Airport. Peter Pan has a small bus terminal located in the Chestnut Hill Shopping Mall. Buses go to the airport every half hour from 5 a.m. to 11 p.m. The service, which uses 6 buses, carries 15,000 passengers per month, averaging 200,000 riders per year. Under its contract with Massport, Peter Pan operates an experimental Motor Coach Industries bus that is lift equipped for use by handicapped passengers. In the absence of the service, the airport, already pressed for space in a built-up location, would need to develop parking for additional automobiles.

Peter Pan also runs airport service from Springfield, Worcester, and Westboro, Massachusetts, to Logan Airport. The bus link allows passengers to avoid driving through a congested urban area, and relieves pressure on the airport for additional parking space.

These two examples of intermodal services provided by Peter Pan illustrate the flexibility of bus service. While trains need track and airplanes require airports, buses have the flexibility to adjust to changes in demand without new physical plant development. Flexible utilization of bus service can also allow trains and airlines to meet increased passenger demand without expanding existing physical capacity, or constructing additional parking to accommodate more automobiles.

Regional Air Travel—The Role of General Aviation To understand the importance of air travel for rural areas, it is necessary to examine the role of general aviation and the value of public-use airports to their communities. General aviation encompasses all types of flying, except that provided by scheduled airlines and the military. Typical uses of general aviation aircraft incude executive transport, agricultural spraying, emergency medical services, traffic and news reporting, overnight mail, bank draft transport, and sport and leisure flying. There are over 250,000 general aviation aircraft, while the airlines operate around 5,000 aircraft.

A comparison of general aviation and airlines demonstrates the economic importance of general aviation throughout the country. During 1986, airlines flew an estimated 13.7 million hours. During the same period, general aviation flew 34.4 million hours. Again, during 1986, general aviation carried an estimated 118.9 million passengers, while airlines transported 418.5 million passengers. Another way of comparing the two categories is to look at passengers transported by the two largest carriers: General aviation flew more passengers (118.9 million) than did the two largest airlines combined (96.6 million), and more than 20 of the 30 top airlines (110.5 million). General aviation flew an estimated 4.3 billion miles in 1986, while airlines flew 4.2 billion miles during the same period. Finally, during FY 1986, general aviation conducted 44.0 million operations at FAA control-towered airports, compared with 12.3 million airline operations.

All general aviation activity originates and terminates at airports. By the end of 1986, there were 12,785 airports in the country, with 5,434 of them available for unrestricted public use. While all of these facilities were accessible by general aviation, the airlines served 394 of the locations—or just over 3 percent. Airline traffic is more concentrated, since more than 75 percent of flights are at 50 locations across the country.

Although the busiest general aviation airports are at major cities, 5 of the 10 busiest airports, and 76 of the l00 busiest airports in the United States, have more general aviation than airline operations. At the same time, general aviation services are widespread, since the industry operates from more than 5,400 airports.

Several statistics indicate the significance of general aviation to the communities they serve. For every 1 airport served by airlines, general aviation serves 14. For every airplane the airlines operate, general aviation operates 45. And for every hour the airlines are in the sky, general aviation flies almost 4 hours. Clearly, communities desiring access to the national air transportation system need to rely on a general aviation airport.

Yet the number of public-use airports has declined 19 percent since 1969, from 6,710 facilities to 5,434 currently. While passenger transportation is clearly an important function for airports, economic development is also a priority for many communities that wish to attract business to their area. Lack of an airport can discourage businesses from locating in an area, particularly when quick access to outside sources of supply and information is desired or when a business must supply products on demand.

Clearly, access to air transportation is important for rural areas and smaller communities. However, current congestion conditions at major metropolitan airports throughout the country may lead to reduced access for rural communities. For example, in an effort to reduce congestion at Logan Airport, MASSPORT is proposing to increase general aviation and commuter airline landing fees by as much as 600 percent. Although no final action has been taken to date, the effect on rural communities throughout the Northeast would be substantial. Many smaller communities rely on commuter airlines that fly into Logan Airport to connect with other destinations. Residents of those communities would be required to use automobiles to drive significant distances. Thus, some more rural Northeast communities would become almost inaccessible for air travel. While the proposal would reroute traffic to a less-used airport within the vicinity of Boston, scheduling connections would involve considerable delays for commuters as well as for users of general aviation.

Western Region

Rural Air Transportation in California Although the EAS program was scheduled to terminate at the end of 1988, congressional concern led to passage of legislation to continue the program until 1998. Rural legislators argued that, given the decline of passenger rail and bus service, small communities need scheduled air service to

attract new industry, preserve existing businesses, and, in general, provide the mobility that airplanes supply. In supporting the legislation, the Western Governors' Association stated that an essential level of air service connecting small communities to the national airway system is critical both for their current economic, social, and general welfare and for the future growth of the rural economy of the West.

Statistics on the impact of regional airports bear out the importance of regional/small community airports on the local economy. A 1987 summary of the economic impact of the San Luis Obispo County Airport, San Luis Obispo, California, indicated that direct revenues attributable to the airport were $11,655,540. Employment directly generated by the airport amounted to 451 jobs. Indirect revenues related to the presence of the airport totaled $16,469,750, with 376 jobs created indirectly. The study went further, examining induced impact, or a survey of those business firms indicating they would relocate if the airport ceased to operate. Induced-impact revenues amounted to $15,679,000 and involved 180 jobs.

Economic analysis conducted by the Regional Airline Association found that the economic activity generated by each passenger served by the industry ranges from $238 to $667. This effect ripples out from each of the 833 airports that regional carriers serve throughout the United States, with the nationwide impact well over $7 billion in 1987.

The most dramatic impact of deregulation on regional airlines has occurred in the last 2 or 3 years, including a drop in the number of airlines from about 250 to just under 180 in 1984. Code sharing has led to increased competition, which in turn has led to a decline in the number of operators.

In California, 21 communities are in the EAS program, at an annual cost of $850,000. Under provisions of the EAS extension, new communities may join the program but must contribute 50 percent of the cost. State funding to support small community airports also may be available. California is working with communities to retain air service where there is no transportation alternative.

An ongoing example of the need for air service in rural communities as a condition of economic growth is provided by two California communities. The two communities, Blythe and Crescent City, are the locations of new California State prisons. Both communities are in remote rural areas with limited access to transportation. It is expected that both prisons will spend between $1 and $2 million annually on local goods and services. Employment will range from 650 employees at 100-percent occupancy to 2,881 at 190-percent occupancy. Visitor estimates range from 375 to 500 per day. Loss of air service would result in increased costs to the State for transportation, to employees with no alternative other than the automobile, to visitors with no transportation, and to the localities unable to access the commodities and services needed to meet prison demands locally.

One aspect deserving mention in relation to airports is the growth in ground transportation service from rural areas to urban airports. The California Department of

Transportation publishes a directory that lists ground transportation service for most airports. An intercity carrier provides airport service from Bend, Oregon, to the Spokane, Washington, airport, while a rural provider in western Washington is beginning to operate a contract airport service. While data would need to be gathered airport by airport, it appears that rural areas are gaining access to airports through an increased variety of ground transportation services.

Rural Taxi Service in California As of January 1987, there were approximately 4,579 taxicab fleet operators in the United States operating 160,226 vehicles and employing 285,226 people. Family businesses and individual owners make up 91.1 percent of taxi operations. The local flavor of the industry is apparent in the widespread nature of taxicab services. Taxicab operators serve virtually all communities in the country. Twenty percent of the operators serve communities with populations of l0,000 or less. In California, the numbers serving small communities are slightly lower, with 17 percent located in communities of under 10,000 population.

In all areas, taxicabs provide services ranging from traditional exclusive rides to the transportation of blood and medical supplies to hospitals. Services range from special services for the handicapped to package delivery for local business firms.

In California, there are approximately 288 taxicab fleets in operation, or about 6 percent of the total number of fleets in the United States. Of the 288 fleets, 217 have operations of 10 vehicles or less. Eighty percent of the small operators are in the metropolitan areas of the State, leaving about 44 taxicab companies to serve the rural areas.

Taxicab operators in the metropolitan areas are doing well, but the overall size of the industry is declining. Little is known about the failure rate of firms in the taxicab industry, but it is clear that many failures occur in rural areas where there is little or no public transit. These rural companies represent a fragile, yet vital transportation resource for rural communities.

Since 1975, the number of rural taxicab operations in California has dropped by approximately 50 percent. While there are a variety of reasons for the decline, it occurred at precisely the same time Federal funds for human service transportation expanded significantly.

Although there are no data on the numbers of human service agency vehicles in areas served by taxicabs, evidence indicates a one-to-one trade-off of agency vehicles for cabs. For example, in Davidson County, North Carolina, in 1978 there were 12 taxicabs. By 1986, there were six taxicabs and six vehicles in a county-operated service for the elderly, handicapped, and other human service clientele. In Barstow, California, there were l4 taxicabs in 1979, but today there are seven taxicabs and seven vehicles in a county and city service for the elderly and handicapped.

Even though approximately 30 percent of the cab companies in California have human services contracts, the small, rural cab companies are not involved in huma

service transportation. While such companies are eligible to provide those services under contract, many rural companies are not aware of the public hearings process, do not have the staff available to complete the required application/Request for Proposal, or do not want to be involved in providing transportation that appears to require excessive paperwork.

As a result of what has happened in California during the last 10 or 12 years in the rural taxicab industry, the overall situation appears to be changing. Rural taxicab firms are increasingly becoming a sideline to another business. Many of them operate garages, gas stations, ambulance services, or some other business that works well in conjunction with a taxicab operation. The difficulty is that when problems arise in the business operation, the taxicab component tends to be shut down, resulting in the loss of another rural taxi service. Using recent history as a guide, the outlook for the rural taxicab operation in the State of California does not appear favorable.

Amtravel—Intermodal Connections In California, the Department of Transportation and Amtrak contract with bus companies to link Amtrak destinations and to feed passengers into Amtrak routes. Amtravel has been a contract carrier with Amtrak since 1972. The company also runs incidental charter routes with the railroad.

Amtrak trains come into Oakland, but not San Francisco. As a result, train passengers are bussed into San Francisco. Amtravel runs a bus from 6 a.m to 10:30 p.m. to accomodate rail passengers traveling to and from San Francisco. Since ridership can vary considerably, the bus is radio equipped so the driver can call ahead to let the stationmaster know the number of passengers and the expected time of arrival. The stationmaster can then be prepared with the proper number of tickets. The bus drivers collect no money, with the train ticket agent collecting for the through fare.

Amtravel is also involved with commuter service through a contract with the Golden Gate Bridge District. The service begins when a commuter club is formed and petitions the district for a bus. The commuter club pays a certain amount of money, the contractor contributes a specified amount, and the district pays a portion of the total cost of operating the bus. For example, the University of California Medical Center operates six buses for its employees under a commuter club arrangement.

The bulk of Amtravel's business, however, has become charters and tours in response to the changed market created by deregulation. While charters and tours generate revenues, bus companies are facing a number of problems brought about by increased competition. A major difficulty is obtaining drivers. The problem is especially acute in urban areas where competition forces driver pay below urban living costs. In response, bus companies are increasingly becoming nonunion to reduce labor input costs. Another associated difficulty is obtaining skilled drivers. One solution might be a department of transportation-sponsored program to train drivers.

Rural Mobility: Local Providers

While intercity carriers are devising new methods of generating ridership, State and local governmental units also are developing transportation systems that serve local areas and/or specialized populations. These systems, many times consisting of a

limited number of vehicles, may be partially funded by a Federal program such as Section 16(b)(2) of the Elderly Americans Act, administered by UMTA. They may receive State funding as part of State matching funds. Local governments also may provide matching funds to receive Federal funding. It is important to recognize that these systems can only provide transportation within a local area, such as a county or a multicounty area within a State, and cannot cross jurisdictional boundaries. While these local transportation systems provide the only public transportation available to rural residents in many rural areas no longer served by intercity bus, not all rural areas are served by local provider systems.

Most rural transit systems began as human service transportation providers, either single-agency or coordinated systems. Many expanded to rural public systems with the aid of the UMTA Section 147 program during the mid-to-late 1970's, and are now funded under the Section 18 program.

Today, typical rural transit systems tend to be nonprofit (either private or public) and are operated by an agency on aging, a community action agency, or a coordinated regional agency. For most of these agencies, transportation is just one of many services being provided. Although rural transit authorities or systems providing transit as their exclusive purpose are gradually emerging, they are still a minority.

Typical users/riders of rural transit are the elderly, disabled, low-income, and under or unemployed. Most rural transit systems do not provide frequent, countywide routes. More likely, service is infrequent, sometimes only one route a week, and may be limited to areas of greatest need.

Rural transit is seen as a growth industry because specialized transit needs are increasing. More and more rural areas are forming some type of rural transportation network. Those areas with fragmented agency services are beginning to coordinate for greater efficiency. There are, however, limited State and Federal funds to match this local expansion.

Several trends are emerging today in rural transit. The UMTA assumption of the FHWA Section 18 program brought about regulatory confusion. Stricter regulations intended to protect private enterprise, address labor issues, and create efficiencies in urban areas have also been applied to rural areas. The result is rural systems attempting to apply urban mass transportation standards to transit systems serving dispersed, sparsely populated areas.

Human service transportation remains the financial foundation of most rural transit systems, with funds more widely available than Section 18 monies. Human service transportation, however, is largely limited to specific trips and purposes and cannot provide for a person's broad transportation needs. As the costs of transportation rise, many agencies are withdrawing funding from coordinated systems, leaving riders to pay their own way with limited public subsidy.

As Federal funds shrink, more responsibility for funding transportation is extended to State and local governments. This decentralization poses special problems for

transportation providers in very poor rural counties, where funding is severely limited or simply not available.

As money becomes increasingly scarce, there is less cooperation among funders of transportation. Riders in rural areas are now many times categorized by trip purpose or sponsor. In some areas, sponsors bicker about "who is a public rider."

More cooperation with private providers is occurring, partly out of necessity and partly supported by Federal initiatives. As a result, taxi companies and rural entreprenuers are providing more rural transportation than in the recent past.

North Central Region

OATS, Inc.—A Regional Rural Provider in Missouri OATS, Inc., a private, not-for-profit organization, provides transportation to 88 of 114 counties in Missouri. Established with Older Americans Act funding in 1971, it has since broadened its clientele base. The majority of its riders are made up of the elderly, handicapped, and low-income persons. It provides some intercity transportation, but most of its service consists of serving intracounty travel needs. Service is provided on a contractual basis, with a contact person located in each town to reserve rides.

As an established rural transportation provider, OATS offers several observations for those interested in establishing rural passenger transportation. A number of factors need to be considered before initiating service in rural areas. First, it is important to distinguish between need and demand: Need based on demographic patterns may not necessarily translate into actual passenger demand. Second, starting small and expanding to meet increased actual passenger demand is a wiser course of action than starting too large and cutting back in the absence of passengers. Third, given limited funding, trip purpose should be used to prioritize service. Trip frequency, a factor used to prioritize rides, may also be determined by trip purpose. Length of trip may in turn affect frequency of trips, since many clients may not be able to ride for long periods without rest stops. Fourth, intercounty trips should be coordinated whenever possible. Finally, passengers should be strongly urged to contribute towards their fares, even though their contribution may represent a small portion of the total cost; contributing towards the trip cost instills more passenger commitment than does a "free" ride.

In discussing the OATS system, the OATS representative observed that the rural population makes up 25 percent of the total U.S. population, but receives only 3 percent of the transportation dollars. Yet it costs more per capita to provide transportation to rural people: Low population densities require longer trips per passenger. The barriers to coordinating existing rural transportation providers are many and real: Coordination between public and private, between private and private, and between public and public present difficulties that must be overcome to provide maximum mobility to rural residents.

Regional Transit Authorities—An Iowa Transit Operation Regional transit authorities provide rural passenger service in many rural areas. An Iowa Transit Authority, initiated by the Area Agency on Aging, became a private, not-for-profit agency in 1979. Mandated to serve nine counties under 601j of the Iowa Code (the coordination program), the authority provides 235,000 rides per year in a rural area where the largest city has a population of 9,000.

An annual budget of $4l4,000 is made up of Section l8 monies, State transit assistance funds, regional contracts, fares, and interest payments, with regional contracts representing the largest single source of revenue. The authority has 47 contracts with a variety of human service agencies throughout the 9-county area. Senior services and Headstart children are two examples of the type of client served by the transit authority.

Coordination of service means many things for rural passenger transportation, but for the transit authority it means that the use of funding is maximized and rural people receive the best possible service for the money available. Rural transit systems must be alert, however, to the possibility of further coordination wherever possible and must be keenly aware of their clientele. For example, only two people came to a public hearing to protest the loss of an intercity bus route, but recording the number of requests made by clients that involved intercity transportation revealed that a considerable number called the transit authority when, in fact, they could have used the intercity bus system.

State Assistance to Rural Passenger Transportation—The Michigan Case States can assist rural passenger transportation in a variety of ways. Michigan is combining State and Federal funding to maximize the level of transportation services provided. Michigan has 83 counties: 81 of those counties have some form of public transportation. Fifty-five counties have countywide transportation systems.

The State is focusing on reinforcing private bus carriers, since a healthy transportation system generates recreation dollars through its tours and charters. Approximately $57 million in revenues from out-of-State tourism and $35 million from in-State tourism represent a substantial part of the State's economic base. The State publishes a public transportation directory that lists all modes of transportation, including air, ferry, rail, county bus services, and intercity bus lines. The directory emphasizes the use of public transportation as a means of accessing tourist attractions.

Beyond encouraging the tourism industry, Michigan is working to ensure that existing carriers can continue to provide service in rural areas. The State is utilizing Section 18 funds to the maximum amount allowed, and using administrative monies to subsidize carriers offering service in rural areas.

Because outmoded or dilapidated facilities can discourage use of intercity buses, Michigan is building terminals that intercity carriers can use at a nominal cost. Some of the new terminals are intermodal, providing direct transfers from intercity buses to passenger trains, transit buses, taxis, and airport limousines, which overcomes the

limited use of facilities owned and operated by a carrier or sector of the industry. In smaller communities where travel is lighter, weather-protected passenger shelters are being built as bus stops.

Michigan is cooperating with Amtrak to develop train routes, extending Amtrak service from Chicago to Grand Rapids, offering overnight service to and from New York City and Boston, and providing daily train service between Michigan and Toronto and Montreal, Canada.

Michigan also is working to make its transit systems physically accessible to all people, particularly senior citizens and handicapped persons. All urban transit systems, countywide transit services, and small-community transit services operate vehicles that are accessible to and usable by senior citizens and handicapped persons. Many of the State's intercity bus carriers provide a "Helping Hand" service for those needing assistance. The service offers individual assistance to passengers in boarding and exiting.

Eastern Region

JAUNT, Inc.—A Regional Rural Provider in Virginia The JAUNT transportation system began in 1975 as a coordinated human service transportation provider and expanded to become a rural public transit provider in 1976 with Section 147 funds, with the system now receiving Section 18 funding. In 1980, part of JAUNT's service area became urbanized so that JAUNT now also receives UMTA Section 9 funds. Since 1980, JAUNT has operated the Charlottesville, Virginia, area regional ride-sharing system.

JAUNT's service area includes a small urban city and five rural counties. The system operates 30 vehicles, which are vans or van conversions. It employs a staff of approximately 36, but also uses a large number of volunteer drivers, primarily from human service agency staffs.

Services provided by JAUNT include transportation for the disabled, a consolidated transportation system for all human services in the area, rural- to-urban and rural-to-rural work routes, a rural-connector service with Greyhound Lines, and a regional ride-sharing and transportation brokerage service.

JAUNT has several special features which distinguish it as a rural provider. It offers a rural-sector service that has lower fares on certain days of the week in designated areas. The lower fare is offered to encourage voluntary pooling of riders, which in turn reduces costs. The rural-to-urban employment/work routes are recovering 65-85 percent of direct operating costs. On one route with a volunteer driver, fare recovery is reaching 120 percent of costs. A staff person works solely on community organization and outreach to improve agency coordination, design routes, troubleshoot, and supervise out-based drivers.

JAUNT's most interesting success has been a route designed to provide transportation for employees to a rural ski resort. The JAUNT community worker and a counterpart within the regional community action agency contacted the ski resort and presented it with an employment proposal: JAUNT would find people needing employment and rides, and bring them to the resort for interviews; the resort would hire employees from the same areas of the county to work the same shifts so that transportation could be provided efficiently. The result was jobs and transportation for more than 70 previously unemployed rural residents. The ski resort had previously hired only persons with personal transportation. With the project now in its third year, some individuals have permanent employment. Some have bought their own vehicles and started carpools.

Another feature of JAUNT is its emphasis on safety and training. All drivers, including volunteers, must meet the following requirements:
-almost perfect driving record
-screening on employment
-physical examination on employment and yearly thereafter
-criminal record check
-certificate in First Aid and CPR (set up by JAUNT)
-course in defensive driving (designed and taught by JAUNT)
-course in Passenger Assistance Techniques (national certification).

JAUNT checks the State's driving records annually, conducts annual driver performance evaluations, and has established a safety committee to evaluate every accident/incident. An annual safety program provides cash awards to safe drivers. In emphasizing its commitment to safety, JAUNT demonstrates that rural transit can be highly professional at a very low cost.

AppalCART—A Coordinated Local Service Provider AppalCART is a coordinated and consolidated rural and small urban transportation authority in northwestern North Carolina. The organizational structure and activities of AppalCART, however, evolved over several years as rural and small urban transportation needs changed.

In January 1980, the Watauga County commissioners passed a resolution forming the Watauga County Transportation Authority (WCTA). At the same time, Appalachian State University began operating its own Appalachian Campus Area Rapid Transit system, known as AppalCART.

By September 1981, WCTA had consolidated the van fleets operated by WAMY, a community action agency, and Watauga Opportunities, a sheltered workshop, to form one coordinated Section 18 project for the county. The coordination took place as a direct result of the county's transportation development plan, required by a Governor's executive order before any county could receive government funding for public transportation. Before the consolidation, WAMY had received Section 18 funding and Watauga Opportunities had received 16(b)(2) monies. Since September 1981, WCTA has used the same funding source to avoid duplication of vehicle purchases. Today, the same vehicle may be used for a sheltered-workshop route early in the morning

and for a project-on-aging route later in the day. The net result of the consolidation was a decline in the number of vehicles in use.

In May 1982, Appalachian State University began training the WCTA staff to operate its 30-foot buses. By the end of the summer, WCTA had taken over fixed-route service in the town of Boone, and had adopted AppalCART as its business name. The red apple became the logo and all vehicles were painted with red and green striping on white.

By late 1983, AppalCART began providing contractual commuter services for the local ski industry. In December 1983, Beech Mountain Ski Resort contracted with WCTA to provide transportation service to and on the mountain. In 1984, Sugar Mountain contracted with WCTA for shuttle service. In 1985, Ski Hawksnest contracted with WCTA for a route between Appalachian State University and its resort. And now, to accommodate the needs of the ski runs, the buses have been outfitted with ski racks; ski trips generate 100,000 passengers per year.

In July 1986, WCTA became an independent agency with its own finance office and personnel policy. The transportation advisory board became the WCTA, and AppalCART was adopted as the official name of the agency. Watauga County appoints a five member volunteer board, with each member serving a 2-year term of office. One member is a county commissioner, one a Boone councilman, one member represents the university, another the human service agencies, and one member is an at-large appointment.

In addition to providing human service transportation, college student transportation, ski commuting, and general-public transportation under the Section 18 program, AppalCART also contracts with the community college for charters. It transports school children under contract with the local school district and provides after-school transportation to daycare facilities for children of working parents. AppalCART currently is considering expansion of its route service from Appalachian State University to Boone.

In December 1987, AppalCART became the Greyhound ticket agent and terminal in Boone, the first Section 18 provider in the United States to become a ticket agent. Under this arrangement, AppalCART receives a commission for selling Greyhound tickets and payment from Greyhound for providing terminal space. AppalCART riders can transfer to Greyhound's intercity system, and thus access destinations outside Watauga County.

From July 1, 1986, through June 30, 1987, AppalCART operated over 265,000 miles carrying just over 300,000 passenger trips. It has a fleet of 25 vehicles, including 10 buses, 5 van cutaways, 2 lift-equipped vans, and 8 other vans.

AppalCART does not receive State operating assistance: State funding is limited to administration and capital costs. The contract routes developed with ski resorts and charter tours help finance regular route service throughout the county. As the primary

provider of transportation services in an isolated, mountainous, rural area, AppalCART has been able to respond to market demand for contract services while continuing to serve the public transit needs of rural residents without access to transportation. While a public agency, AppalCART's organizational structure is sufficiently flexible to allow it to respond to market opportunities that can generate revenues to support its public purpose.

New York State—Assistance for Rural and Intercity Transportation Although the image of "New York" conveys tall skyscrapers, bustling crowds, jammed subway trains, and urban living at its most crowded, upstate New York has the largest, remotest, and wildest wilderness east of the Mississippi and a rural population sixth largest among all States.

The State of New York provides a variety of programs to assist rural mobility. The Department of Transportation's Transit Division, which encompasses rural passenger transportation programs, is divided into 4 bureaus: Transit Operating Assistance, Rural Transportation Unit, Capital Grants, and Technical and Management Assistance. Since each transit bureau addresses rural transportation in a slightly different fashion, it is difficult to determine what proportion of the money is strictly for rural purposes. A conservative estimate puts the amount at approximately $10 million per year.

Responsibilities of the Rural Transportation Unit encompass public transportation projects in rural areas and urban areas with populations of less than 50,000. The unit implements Section 18 and two State programs.

The Section 18 program focuses on counties as a unit so that almost none of the systems cross county lines. As a result, concern centers on shorter trips for work, shopping, and medical purposes. Providers serve Section 18 areas with fixed-route, route deviation, dial-a-ride, and commuter services. Funding for the program in 1987 consisted of $2.75 million in Federal funding and $2 million in State monies for operating subsidy and a new coordination effort. The Federal Rural Transit Assistance Program (RTAP), which accompanies the Section 18 program, promotes technical assistance to operators. New York is considering an outside consultant—most likely a university—to handle the program.

The State provides up to 20 percent matching funds to Section 18 for operating assistance. Such assistance is distributed on the basis of need: It considers population in making grants.

The benefits of the Section I8 program have been widespread, bringing transportation to parts of the State that previously had none. There are currently 50 recipients, with 36 existing before the program began in the late 1970's. Besides new systems in a number of small towns, there is now transportation in some rural counties.

The Rural Public Transportation Coordination Assistance Program is 100 percent State funded and is targeted toward counties under 200,000 population—or 40 of the

State's 62 counties. The program provides money to counties to set up and implement a transportation plan that coordinates all transportation services within a county, including human services.

The Transit Operating Assistance (TOA) Bureau addresses rural transit on a broader scale—the intercounty level. The TOA program began as an outgrowth of the gasoline shortage of 1973 and the realization by the State legislature that existing public transportation could not take on a sudden, sharp increase of passengers. The legislature mandated a report on the state of transit and a projection of fares and passengers for the next 28 years. The result of the report was passage of transit operating assistance.

The bureau has the largest budget in the Transit Division—$1 billion—with 95.2 percent ($961.5 million), allocated for the New York City systems and the systems of Nassau, Suffolk, and Westchester Counties. The remaining $41.5 million is used for the rest of the State, with $4.5 million used in rural counties. The seven intercity bus operators described below under the intercity portion of the program receive $6.9 million of the TOA program.

The State has several dedicated funds that finance the TOA program, with a 0.75-percent gross-receipts tax collected statewide allocated to fund all TOA, including the upstate programs. Several taxes collected only in the Metropolitan Transportation Authority (MTA) area fund the MTA, including 0.75-percent long-lines receipts, corporate franchise tax surcharge and the 0.25-percent sales tax. Finally, the New York City mortgage tax, collected in New York City only, provides funds for the MTA, the subway, the city's bus system, and private carriers in New York City.

Four intercity bus companies—Short Line, Blue Bird, Adirondack Trailways, and Empire Trailways—became eligible for the TOA program at its inception. These companies, however, became part of the program as an afterthought. Since the legislation focused on metropolitan transportation problems, it did not specify intercity bus carriers as eligible companies because intercity transportation was not a metropolitan issue. When the bus companies became part of the program, it became clear that the transportation problem extended beyond the urban areas.

Under the legislation, counties were to contribute toward the program, but in most cases the program is wholly State supported, since local funds are actually pass-through funds from the State. While the arrangement provided for some local responsibility in larger counties, many rural counties had no resources for administration or support.

The original legislation required that a carrier be sponsored by the county in which the service was provided, and mandated that the carrier submit quarterly reports to the county for payment. If a carrier passed through 30 counties, it then was required to submit 30 quarterly reports. When Greyhound joined the program in 1982, the law was amended to allow carriers passing through seven or more counties to be sponsored directly by the State and to submit one quarterly report. Currently, seven

intercity carriers, including the original four plus Greyhound, Thousand Islands Bus, and Kingston-Pine Hill Trailways, are directly sponsored by the State. Another 18 intercity carriers, all passing through fewer than seven counties, are sponsored by counties.

The result of the the TOA program is that a basic network of intercity bus routes has been maintained throughout the State. Where deregulation brought about abandonment of routes, Section 18 was able to take over in some instances. Through reporting requirements, the State is able to monitor the performance of the various routes operated by member companies. As a result of that monitoring, one of the participants of the TOA program is now feeding Amtrak service at Buffalo, and the State is attempting to widen that function.

Since all routes are not cost-effective, New York is experimenting with other cooperative efforts to maintain service levels. One of these includes the Greyhound Rural Connection Program in Clinton and Essex Counties, which border Canada. The program allows the maintenance of service with smaller vehicles that are operated by local carriers. These are advertised in Greyhound schedules and given through-ticketing. New York is experimenting with the Rural Connector program in several counties and is hoping to extend it throughout the State.

The TOA program is encountering problems on a variety of fronts. Rising costs, declining ridership, need for better coordination between the intercity and rural programs, maintenance of service, the need for a distribution fund more attuned to the needs of rural operations, and domination of rural areas by New York City issues are some of the problem areas.

The TOA program, however, has been successful in maintaining fares and services throughout the rural areas. Although service abandonments and cutbacks have occurred, the intercity system operating in the l970's has remained virtually intact. The existence of a basic intercity network provides a viable basis for future rural passenger planning efforts.

North Carolina—State Participation in Rural Intercity Transportation The North Carolina Department of Transportation has long recognized the importance of intercity passenger transportation, especially in the more rural portions of the State where no alternative public transportation is available. The State is involved in several programs addressing rural passenger transportation, each considering different aspects of the transportation system.

A major area of concern is intercity bus transportation. In 1978, the Governor's Committee on Rural Public Transportation recommended that funds be used to provide financial assistance to the intercity bus industry. In 1981, the North Carolina Department of Transportation initiated its subsidy of intercity bus projects by utilizing UMTA Section 18 funds to purchase three round trips per day in the northeastern part of the State. The Virginia Dare Transportation Company operated a route between Elizabeth City and Manteo, a one-way distance of about 50 miles. The State

committed approximately $60,000 per year to the project until it ended in June 1987. The Department is evaluating the continuation of the project, and is holding public hearings to review the service. One daily round trip between Asheville and Murphy, a distance of 100 miles in the western part of the State, was subsidized for 26 months at an annual cost of $34,000.

The North Carolina Department of Transportation is developing an agreement with the Seashore Transportation Company, a subsidiary of Carolina Coach Company, that will allow Seashore to continue to provide six round trips per day along four different routes in eastern and southeastern North Carolina. There is no other public transportation available in the area.

While the State Department of Transportation has funded projects on a 50- percent net-cost basis as allowed by the Section 18 program, its level of financial participation will be based on a multitier incentive approach that encourages an increase in the number of passengers served. For example, in assisting Seashore to maintain current levels of service, the State will provide Seashore with one cent per passenger-mile up to 75 percent of their projected passenger miles. If Seashore increases its level of service beyond its projected amount, the State will provide two cents per passenger-mile for each additional mile, up to a specified maximum. This reimbursement represents a payment based on 125 percent of the company's estimated passenger miles. The State also will assist the company in its marketing efforts and in coordinating with providers of local public transportation.

Beyond direct funding of intercity routes, the State has erected bus station directional signs in the approximately 90 towns across the State that have full-service bus stations. They have published a "Public Transportation Guide" that provides information regarding intercity bus routes across the State and the location of full-service bus stations. They have also participated in several marketing projects in conjunction with the intercity bus industry. More recently, the State has fully supported Greyhound's work with rural transportation providers to develop feeder service into Greyhound's national-route system.

While North Carolina has been involved in funding intercity passenger transportation over the past several years, the State Department of Transportation is now evaluating the most appropriate role for the State. As rural areas continue to lose intercity bus service and lack the resources to establish publicly funded systems, it is becoming increasingly important for the State to develop a comprehensive intercity bus funding policy to guide decisionmaking on intercity projects. In the past, the department has used a variety of criteria to evaluate participation in such projects, including availability of other public transportation modes in the service area, support of local governments, ridership/operating ratio of current service, economic impact of both ridership and package delivery, and cost of participation versus anticipated ridership.

However, such an intercity bus funding policy must be formulated within the context of the department's overall public transportation program. Since the Section 18 program is the only source of public funds available to subsidize intercity service, the

department's goal is to distribute the funds across the State both fairly and equitably, while delivering the most public transportation possible in a cost-effective manner. Twenty-two rural and small urban transportation systems are funded with the State's $2.8 million allocation, a 13-percent reduction from 1987. The difficulty is meeting public transportation needs with severely limited funding.

Deciding which public transportation option to fund involves determining which mode provides the greater benefit per dollar spent. The consequences of not funding intercity projects need to be evaluated. Answers to these questions in the past have evolved from professional experience rather than from established decisionmaking criteria. The precise importance of each public transportation service has not been calculated from a public policy perspective. The proper allocation of limited funds for public transportation in the near future will require that this calculation be performed.

Massachusetts—The Intercity Bus Capital Assistance Program Massachusetts operates a number of programs designed to improve passenger transportation services for rural residents. Each program addresses a different facet of rural passenger transportation.

A primary program concern is intercity bus service. Massachusetts recently established a $10 million capital assistance program for the State's intercity bus industry. The Intercity Bus Capital Assistance Program (IBCAP) works with private carriers to upgrade equipment used in commuter services. The program is structured around a 7-year lease agreement between the Massachusetts Executive Office of Transportation and Construction (EOTC) and participating carriers. EOTC purchases the coaches and leases them to participants at a savings of 50 percent or more over commercial leasing. The terms are designed to recover completely the State's principal cost by the end of the 7-year period.

Bus companies must be based in Massachusetts to be eligible. Evaluation criteria include the company's average fleet age, required fleet size, and the intended use of the vehicles. EOTC gives priority to applicants who agree to reserve their IBCAP buses exclusively for regular-route service. Additional selection criteria involve the availability of public transportation between the points served, travel demand and traffic congestion in the service area, and the managerial capabilities of the applicant.

EOTC obtained the first $5 million in program funding through a transportation bond package passed in 1983. The first round of leases, awarded to nine participating carriers, provided for a 12-percent turnover in the Massachusetts-based intercity fleet, improving the average fleet age by 2.4 years. These improvements have been accomplished at an average monthly lease payment of $655 per coach, compared with commercial rates of up to $2,000 for similar equipment.

The 28 MC-9 coaches, built by Motor Coach Industries, were specified with many passenger amenities, including a retractable low step for easier entry and exit. Six of the coaches were fitted with prototype wheelchair-lift devices, the first use of lifts on intercity coaches in the United States. The potential market for the lift service includes

an estimated 12,000 wheelchair users living at home and accompanying friends and family members, as well as those with chronic disabilities who cannot travel by car.

EOTC scheduled a second procurement of 22 accessible coaches for delivery in 1988. As in the first phase of the program, $5 million in bond funds have been committed to the program. Thirteen carriers have applied to lease the vehicles, indicating strong continued interest in the program. All coaches in this phase will be equipped with wheelchair lifts, bringing the accessibility of the Massachusetts-based intercity fleet to approximately 10 percent.

To ensure appropriate use of the lift-equipped coaches, EOTC is working with agencies to address issues related to wheelchair use, including consumer awareness of the lift service, the availability of local transportation to the bus terminals, and architectural barriers at the terminals.

EOTC has implemented several other programs to assist carriers in providing effective transportation services. The EOTC has developed and instituted a Statewide Access Pass that is available to the State's elderly and handicapped residents. Statewide Access Pass holders will be able to travel in any region at the same reduced fares that apply to local users and without restrictions based on their area of residence.

A State-funded, $2 million operating assistance program has been initiated to preserve and expand commuter services to downtown Boston and to increase feeder service to outlying rapid transit and commuter rail stations. EOTC has published a marketing brochure titled "Boston by Bus," which provides service information about the 14 intercity carriers serving downtown Boston.

The State's nonprofit ride-sharing corporation, Caravan for Commuters, Inc., has helped private carriers develop commuter markets through a charter bus brokerage service for private employers.

In other actions, the State has authorized more than $1 million in fuel tax rebates to the bus industry since 1984. It also helped finance several new bus terminals, including a $35 million terminal in the South Station Transportation Center in Boston.

Through its efforts to assist the intercity bus industry, Massachusetts has formed a partnership with the private sector to ensure that passenger transportation will be available to all State residents. Such private-public cooperation ensures that public objectives will be met through more efficient use of available private resources.

Western Region

Regional Transportation Provider—A California System Fresno County is located in the center of California in the San Joaquin Valley and is often referred to as the "agricultural capital of the world." The county is shaped like a mis-tied bow tie, slanted at a 30-degree angle. The knot of the bow tie is the Fresno-Clovis metropolitan area with a population of approximately 485,000. About 30 rural communities are scattered around Fresno, with populations ranging from 500 to 15,000 people.

The Fresno County Rural Transit Agency (FCRTA) is a joint powers agency. FCRTA was organized in 1979 to resolve a lawsuit filed against the Council of Fresno County Governments by a group concerned that transit funds were being used for street and road projects.

FCRTA receives funding from a variety of Federal, State, and local sources. Limited funding is available from the Section 18 program administered by UMTA.

The California Legislature established a Transportation Development Act (TDA) which returns to the county one-quarter of 1 cent of the State sales tax collected in the county for public transportation purposes. The act gave special consideration to rural counties under 500,000 population in 1970. It permitted those counties to spend available funds on street and road projects after "reasonable" transit needs were addressed and resolved. As a result, FCRTA transit operations have remained "lean" in order to provide as many dollars as possible for street and road improvements.

Fresno County passed a local sales tax initiative in 1986 that sets aside an additional one-half cent toward transportation. FCRTA is not receiving any funding from local sales tax revenues at this point, but it is expected that within 5 years several local operations will run out of local funds and may need to draw on sales tax revenues.

FCRTA has a fleet of 29 vehicles, all handicapped accessible. The vehicles are predominantly 15-passenger Ford and Dodge domestic vans. However, the system has two 30-passenger Bluebird Coaches that provide service to and from the city of Coalinga on the western side of Fresno County.

FCRTA operates both demand-responsive and fixed routes. Service is provided primarily between 8 a.m. and 5 p.m., Monday through Friday. Each community uses either one or two vehicles. Service areas are defined as "spheres of influence," meaning the area outside the city-limit boundaries into which the community is expected to expand during the next 20 years. Funding is based on cost sharing between the city and county for that particular service area.

FCRTA is a general public operation. Its major service emphasis is serving the transit dependent who are not likely to have any alternate services available in their rural communities. Approximately 85 percent of its ridership is elderly, 3 percent is handicapped, and the remainder is low income general public.

FCRTA is codesignated as the Consolidated Transportation Service Agency (CTSA) for the rural area of Fresno County. Despite a 1979 law (AB120-Social Service Transportation Improvement Act) requiring each county to set up consolidated agencies to address the needs of social service clients, FCRTA is one of the few functioning CTSA operations in California.

The coordination law also allowed the use of TDA funds to achieve its purpose. In Fresno County, top priority was ensuring that potential participating social service agencies did not try to rely on a new funding source to replace existing financial

commitments toward their services. FCRTA interpretation of the law was to maintain current levels of funding and include the additional new funding to expand available services. FCRTA was able to do so, unlike most other agencies in the State, by establishing a matching formula. FCRTA contributes 45 percent of the funding if the social service agency matches the 45 percent and their clients contribute the remaining 10 percent in farebox revenues. When human service programs prohibit charging clients for transportation, the social service agency is required to provide a 55-percent match. This simple arrangement has been well received, and has proven successful.

A major issue facing FCRTA is how to address those individuals who consciously decided to move to a remote outlying area, and now feel that they should have access to transportation services equal to those found in urban areas. The possibility of providing a roving vehicle to accomodate those individuals is being explored, while the cost of providing the service is being calculated. This action is in response to State legislation signed into law during 1987 that requires transit agencies to establish a committee to evaluate unmet elderly and handicapped needs, and to ensure that rural transit agencies are addressing all possible combinations of need that may exist in a rural area.

Since FCRTA began, the policy board recognized the role that common carriers played in Fresno county. Existing carriers linked quite a number of cities with the metropolitan area, and provided interregional services throughout the State. As a result, the board has been been aware of opportunities to coordinate FCRTA transportation services with common carriers. In 1979, Fresno County was served by Trailways, Greyhound, and Orange Belt Stage Lines, a local carrier dating back to the stage coach era.

FCRTA has developed a subsidized ticket arrangement with common carriers. Tickets are purchased from the depots and resold at 50 percent of the original purchase price to the city hall in each of the incorporated cities served by the carrier. The arrangement provides the advantage of buying the tickets at full price and receiving a 50-percent farebox return on them from ticket purchasers. The half-fare tickets are available to elderly, handicapped, and low-income individuals. But, anyone who walks into city hall and asks for a ticket is allowed to purchase one. No special qualifying forms need to be completed.

The accounting forms used to monitor ticket use are simple. FCRTA has a "purchased ticket form" and a "resold ticket form," and attempts to track tickets by number. A ticket is marked to indicate which city hall has resold the ticket. Before the tickets were marked, it was possible for someone to purchase multiple tickets at a city hall, make the trip into Fresno, and receive a full (100 percent) refund on the unused tickets at the Fresno depot.

FCRTA service arrangements provide a coordinated rural transportation system. Intracity services pick up patrons at their homes and transport them to interlining bus stops to make common carrier connections. Patrons transfer to intercity buses to

make trips to the metropolitan area. Once in Fresno, they can transfer to other interregional destinations or utilize the Fresno Transit fixed-route service.

Since not all individuals can negotiate the steps of common carrier vehicles, FCRTA provides backup services, at the same reduced fare, to elderly and handicapped patrons. The service has functioned quite successfully. An example is provided by an elderly man living in the city of Mendota whose wife lives in a rest home 46 miles away in Fresno. Each day the husband uses the common carrier or the backup service to visit his wife. If either service were not available, the couple would be separated.

FCRTA is fortunate to have Greyhound and Orange Belt Stage Lines linking Fresno County cities. The relationship has been very good, but there have been situations that have not been resolved. However, early indications are that FCRTA will be able to work with the new management at Greyhound to improve local arrangements. Several examples demonstrate the issues.

Frequent schedule changes have proven most annoying to local patrons and FCRTA operations. Approximately every 6 to 8 weeks, a new schedule appears with slightly changed times so that more interfacing with common carriers is required. It is not always possible to make that information available to passengers.

A second area of difficulty emerged in marketing. About 7 years ago during a marketing campaign in the western side of the county, FCRTA began publishing ads in community newspapers featuring its intracity and Greyhound information to assist patrons who wanted to go to Fresno. On determining that FCRTA had not received permission from Greyhound headquarters to run its schedule in the ad campaign, FCRTA sent Greyhound a letter requesting permission to publish the information. No answer was received. However, it appears that the new management at Greyhound is interested in working out marketing arrangements with local providers so that a joint effort may be possible.

A second marketing difficulty involves access to the local Greyhound information number. Fresno County residents usually call the telephone information operator and are given the general Greyhound information number located in Los Angeles. When potential passengers from Selma, California, (located in Fresno county) call for time and cost information, they are often quoted information for Selma, Alabama. Publication of the Fresno depot telephone number would allow Fresno County residents to call directly for schedule and fare information.

Another FCRTA goal is to publish schedules and telephone numbers in *Russell's Guide*. Again, in conjunction with Greyhound's Rural Connector program, it looks as though that objective will be met shortly.

The interfacing of FCRTA services at the Greyhound depot in Fresno could also be improved. FCRTA is currently attempting to utilize the loading zone in front of the depot, but when taxicabs park in the zone for extended periods of time, FCRTA

vehicles are forced to double park. FCRTA is looking to negotiate the right to pull through the back of the depot and park along the other large passenger vehicles to facilitate connections for mutual patrons. Along the same line, improved bus stop locations would also allow greater interface potential with Fresno Transit. Connections with Amtrak and the Fresno air terminal would also be improved.

To address the interface issues, the council has hired a consultant to study the potential for an intermodal facility. The California Department of Transportation also is conducting studies to determine how to facilitate rural interface connections with Amtrak. While Amtrak connections could indeed increase travel options for rural residents of Fresno County, improved air connections may not prove to be advantageous. On a cost-per-mile basis, Fresno has the highest air travel costs in the Nation. For example, a round trip from Fresno to Oakland, a distance of 157 miles, cost $268 in January 1988. In December 1987, a round-trip ticket to the east coast cost $238.

At this time, carrier schedules are such that riders do not have to stay overnight in Fresno, an important concern for rural residents. During one period, however, planned intercity bus schedule changes would have required an overnight stay for people traveling from the rural area to Fresno. Although FCRTA is attempting to provide more timely transfers, current transfers may not be as convenient for patrons as they could be.

The Regional Transportation Planning Agency continues to monitor intercity carrier service in the valley, expressing its concern for the continuation of service. Working with the private sector is the cheapest way for FCRTA to provide transportation for rural constituents. If one of the common carriers were ever to leave, the total cost to the FCRTA operation would be devastating.

Diversified Rural Transportation—Whitman County, Washington The Council on Aging of Whitman County (CoA/WC) is a private, nonprofit corporation founded in 1976 to provide services to persons 60 years of age and above. The agency is funded by the Older Americans Act, the Washington State Senior Citizens Services Act, other Federal and State grants, and private donations. Most of the funding sources require local matching funds in the form of cash donations or in-kind services.

Whitman County covers 2,153 square miles and includes almost 5,000 persons age 60 and over. Senior citizens make up 22 percent of the county's nonstudent population of 23,000. About 40 percent live in Colfax or Pullman, with the other 60 percent scattered in small towns and unincorporated areas. Over 30 percent of the elderly population are age 75 or older, a percentage greater than the national or State average. The age-75-and-over population has been given a high priority for services. In an average year, 30 percent of all senior citizens will take part in one or more of the programs offered by CoA/WC.

CoA/WC is governed by a volunteer board of directors, with a maximum of 25 members. Four at-large members represent the entire county, 2 members are from

Asotin County, and the other 19 members represent specific communities in Whitman County. Board meetings are open to the public and are held monthly.

The goal of CoA/WC is to maintain senior citizens in their own homes as long as possible by providing community support services designed to meet individual needs. In support of the self-sufficiency goal, CoA/WC operates a variety of programs in three areas: Information and assistance, nutrition, and specialized transportation.

Without the specialized transportation program titled COAST, many senior citizens could rarely leave their homes. CoA/WC operates six vans (four passenger vans and two equipped with wheelchair lifts). Reservations are made through a chairperson in the community or by calling CoA/WC offices. The vans make regularly scheduled runs throughout the county. First priority for seating on the scheduled runs is for the frail elderly and for those senior citizens who have no other access to transportation. Twenty-three separate communities are served, and all are given at least 1 day each month for transportation to Pullman, Spokane, Moscow, or Clarkston/Lewiston. It is more than 90 miles oneway from some Whitman County communities to the major service centers and airports in Spokane and Lewiston/Clarkston.

Many senior citizens ride the vans to shop, visit friends, or avail themselves of recreational opportunities. When the vans are not scheduled, senior groups may request a van and driver for special outings. There is no charge for the regularly scheduled trips, but a donation box is carried in the vans. The suggested donation is 10 cents a mile per person.

The vans are used for transporting senior citizens to various nutrition sites and for shopping assistance in Colfax and Clarkston. If the regular schedules do not meet an individual's needs, volunteer drivers using their own cars are available on a one-on-one basis. If the volunteer driver requests, CoA/WC will reimburse for mileage. Trips provided by volunteers are primarily trips to doctors, dentists, or other important trips such as visiting a spouse in a nursing home.

In 1987, the vans traveled 37,141 miles and provided 9,193 one-way trips at the cost of $6.04 per trip or $1.30 per mile. Over 390 different senior citizens utilized the service. Volunteers provided 1431 trips, totaling 22,634 miles and serving 101 senior citizens. Of the senior citizens using van transportation, over 35 percent were low income, over 63 percent lived alone, approximately 25 percent were handicapped, and 75 percent were over 75 years old. Riders donated $6,313 to support the service.

In 1983, the CoA/WC Board amended its by-laws, expanding the agency purpose to allow service to other populations. Under this expanded purpose, CoA/WC became the lead agency for all specialized transportation in Whitman County. In 1987, the agency received a $70,000 UMTA Section 18 operating assistance grant for coordination and services. The agency now has been receiving Section 18 funding for 4 years. The funding has allowed expansion of specialized and public transportation services within the county.

In 1984, under Washington State law, private, nonprofit, elderly, and handicapped (E&H) transportation providers could not be issued the Washington State Department of Social and Health Services (DSHS) provider number required for reimbursement as a Medicaid, nonemergency transportation provider. The CoA/WC threatened suit on behalf of area residents covered by Medicaid because no Medicaid-funded transportation services were available in the area as required by Federal law. This action led to a pilot program by DSHS and CoA/WC for van and volunteer Medicaid transportation service to any provider holding a Washington State Utilities and Transportation Commission (WSUTC) E&H certificate.

The Medicaid program has been very successful, but excessive paperwork is creating problems for both DSHS and individual transportation providers. Each one-way trip and any surcharges must be individually billed and reimbursed, with the client's number, date of service, pickup point, destination, and doctor's name written on the bill. As a result, reimbursement is now running 120 to 150 days late.

To expedite and streamline services, DSHS, in conjunction with providers, is developing contracts using transit authorities and county governments as the recipients for funding under administrative intergovernmental agreements. When the contracts are executed, DSHS will pay Medicaid funds monthly to the contractor (a county or transit authority) for an agreed-upon level of service. The level of service is determined based on historical cost factors, service levels, and mixes of service modes. Most contractors will, in turn, subcontract with existing transportation providers through a designated Medicaid broker, who in many instances also will be a provider. The new system promises to be much more responsive to local service needs and cost factors than the current statewide, unit-rate reimbursement system. Under the new system, CoA/WC will be a designated broker for at least two counties.

In 1983, the Washington State Utilities and Transportation Commission held hearings on Greyhound's proposal to abandon stops in eight small Whitman County communities. CoA/WC provided testimony in support of Greyhound's petition, stating that the Greyhound schedule created the illusion of service when none existed, and its presence served as a barrier to other entities. As a result, Greyhound has supported CoA/WC's application for Section 16(b)(2) and Section 18. CoA/WC applications have received high ratings based on a high level of coordination with other services.

Since 1983, other providers have filled the gap left by Greyhound's abandonment. A local airport service, previously restricted by State regulations to pickups in three communities and to stops at the airport, is now permitted to pick up on a door-to-door basis and to pick up and deliver passengers for Spokane area medical facilities. Under the old regulations, a person was required to ride within a block of one of the major medical facilities and then 5 miles further to the airport. After reaching the airport, the person had to take public transit, dial-a-ride, or a taxi back to the medical facility. On the return trip, the person had to get back to the airport and connect with the airport service. Restrictions made the service almost useless, especially for chemotherapy or dialysis patients. CoA/WC is looking forward to linking this service with Greyhound under the new Rural Connector program.

Revised Washington Department of Transportation application procedures for Section 16(b)(2) and Section 18 exempt nonprofit providers from the UMTA privatization processes if the Federal funds are a "match" for other funding that has been granted through the competitive bidding process. The process simplifies application procedures and ensures that private transportation interests are met. In many rural areas, it is difficult, if not impossible, to meet the demand for transportation services without mutual support and trust from all the available funding sources and service providers.

State Assistance for Transportation—The Case of Nevada The Nevada Department of Transportation's role in rural public transportation involves monitoring new developments in rural transportation, taking the gaps out of elderly and handicapped transportation through the Section 16(b)(2) program, and administering the Section 18 program.

Nevada includes 110,540 square miles and is home to one million people. Almost half of the State's population is concentrated in the greater Las Vegas Valley, while Reno, Sparks, and Carson City make up the other major urbanized area. In general, rural Nevada is very "rural," with very low population densities. Transportation in rural Nevada is very important, and is usually the private automobile.

Public transportation is available throughout the State in a variety of modes, including taxi, intercity bus, train, and air. Taxi service is found in 10 Nevada communities, while urban transit operates in Reno and Las Vegas. It is worth noting that the Las Vegas urban transit system is one of the last systems under private ownership in the Nation.

The major air carrier markets include the Reno-Cannon International Airport, which serves the Reno/Sparks area, and the McCarran International Airport, which serves the Las Vegas area. Commuter airlines serve Elko and Ely. Ely is the only EAS point in Nevada, and involves a subsidy of $86 per passenger. General aviation is also very active, using over 46 paved airports and more than 100 unpaved facilities.

Amtrak serves two routes through Nevada. The northern route, the California Zephyr, connects Oakland, California, with Chicago, Illinois. Southern Nevada is served by the Desert Wind, which connects Los Angeles, California, and Ogden, Utah. Seven places in Nevada receive Amtrak service, four of which are located in rural areas.

Aggressive marketing and bonus promotions are helping the charter bus tours, airport transportation companies, and gambler specials do well in Nevada. Buses bring approximately 5 million visitors to Nevada annually. Approximately 90 buses daily serve Las Vegas, 135 travel to Reno, and 65 go to Tahoe.

The modal distribution for intercity travel in Nevada shows that 1.76 percent of passengers use the bus, 15 percent use air travel, 0.2 percent ride Amtrak, and 83.04 percent drive automobiles. Visitors use public transportation more than native Nevadans. Thirteen percent use the bus, 14.8 percent fly, 0.3 percent use Amtrak, but 71.5 percent still use the private automobile. In 1950, the bus carried 4.5 percent of

total intercity trips, while air made up 1.8 percent of intercity trips. By the year 2000, it is estimated that the bus will carry 1.4 percent of intercity trips, while air will carry 16.6 percent of intercity passengers. Excluding automobiles, in 1950 the bus carried 35 percent of intercity trips, with airlines accounting for 14.4 percent. However, 50 percent of intercity trips were by train. In the year 2000, it is anticipated that the bus will carry only 5 percent, rail 4.6 percent and air travel will expand to include 90.4 percent of all intercity passengers.

Thirteen intercity bus companies serve 60 locations throughout Nevada. Weekend traffic on I-15 and I-80 from California to Nevada is heavy, reflecting buses destined for gambling. The latest figures indicate 57 departures of regular-route buses per day from Reno, 39 from Tahoe, 47 from Carson City, and 28 from Las Vegas.

Regular-route service, however, has been following the national decline since World War II. Since 1983, Nevada has lost service to 29 places with a total population of 20,000 persons, with the largest being a community of 6,500 people. Of the 20,000 people, approximately 2,000 are elderly. There is one regular-route passenger for each 2,000 persons residing in a community.

Nevada has specialized transportation that complements intercity buses. The Section 18 program is partially supporting seven rural transportation providers on a budget of $150,000. Four of those places served are Indian reservations.

The Section 16(b)(2) elderly and handicapped program in Nevada has placed over 124 vehicles in service at over 47 locations. Currently, the program provides 450,000 rides per year at a cost of $0.60 per mile, with donations equaling $0.03 per mile. The Nevada Department of Transportation received $195,000 to support the program.

Participants in the three regional symposia identified goals and constraints facing rural, intercity passenger transportation. A listing of those goals and constraints as developed at each symposium is included in the Appendix.

Beyond identifying goals and constraints, symposium participants developed strategies for implementing workable solutions to rural passenger transportation. The strategies, also included in the Appendix by regional symposium, look toward a national approach for resolving rural transportation access problems and improving rural mobility. A summary of the key concepts follows.

Public-Private Cooperation

Cooperation between the public and private sectors is considered to be central to the development of solutions. The need for public and private sectors to cooperate at the local, State, regional, and national levels is essential if rural passenger transportation is to meet the mobility needs of rural residents.

Given changing demographics and modification within the transportation industry, it can be assumed that passenger service as known in the past will not continue. Rather, new types of organizations and new linkages will need to be formed to provide rural residents access to transportation. New approaches involving public-private, private-private, and public-public cooperation need to develop, approaches that will allow rural passengers greater flexibility in making travel plans.

Since much rural transportation is "local" in orientation, cooperation between State and local governments and intercity carriers is essential to sustain adequate intercity passenger service. Because providers may in some instances provide transportation over the same routes, coordination among local providers and intercity carriers is necessary to avoid duplication of services and to minimize cost.

Symposium participants emphasized the need to involve not only all levels of government and intercity carriers, but also those representing the business community, users, Indian reservations, rural mail delivery, schools, schoolbus operators, rural organizations, chambers of commerce, and representatives of the various transportation modes. Participants felt that such a broad representation was necessary to clearly understand local needs and generate support for coordinating available transportation resources in rural areas.

Mobilization of Support

Closely aligned with the need for public-private cooperation was the realization that support must be mobilized for rural passenger transportation. Since responsibilities for rural passenger transportation are divided among numerous agencies and organizations, no one group speaks for rural passenger transportation. To that end, symposium participants urged the identification and mobilization of users, public agencies, public and private providers, trade associations, chambers of commerce, consumer advocates, and rural interests to develop public awareness of rural transportation issues.

Development of public awareness is critical for rural transportation, yet bringing together the disparate groups involved in rural transportation itself requires that each

group consider its role within the entire transportation system rather than just its own part. Increasing public awareness requires those involved in rural passenger transportation to cooperate in developing and targeting information for the appropriate audiences. Such a functional group composed of Federal, State, local, and regional officials in conjunction with the private sector would work towards the common goal of improving rural passenger transportation.

Creating such a coalition includes reaching out to the appropriate national, State, regional, and local groups for their input. To bring about an adequate rural passenger transportation system, the input of all involved groups is essential throughout the entire process of issue identification, program definition, and allocation of resources. Rural passenger transportation is accomplished by the community and State, but occurs within the larger context of State and Federal programs. A national-level task force could provide a broad framework within which State and local entities can develop customized solutions to meet local needs.

The need for such a functioning coalition is especially critical today because of the changes occurring in rural America and in the Nation's transportation system. Symposium participants focused on the need for those involved in rural public transportation to provide input into the transportation consensus program currently under way known as Transportation 2020.

Symposium participants went beyond development of a national task force and participation in the national policy building process, pointing to the need for a national public awareness program focusing on rural passenger transportation needs. Such a campaign would use a nationally known individual to highlight rural travel needs. Public service announcements could develop public awareness of the significance of transportation for all Americans, but point to the critical needs of rural areas.

Community Participation

Community participation is a critical component of any rural passenger transportation strategy. "Community" is a geographic concept that can be adapted to specific locations, but generally refers to the population base necessary to maintain a given level of service. Symposium participants saw community participation as essential for the continuation of rural passenger transportation both, in the public and private sectors.

Since carriers are no longer willing to continue rural routes with limited ridership and revenues, community support can play a vital role in ensuring the continuation of service to rural communities by creating a favorable climate for bus service. By providing information on the availability of bus services to the riding public and local business firms, communities can assist carriers with marketing and promotion oriented to local needs.

Similar cooperation between rural public providers and the community is also essential. Cooperation can take a variety of forms. Rural communities can actively participate in identifying needs and service areas, which is critical in planning rural passenger services. Financial and volunteer support also are necessary in establishing and maintaining rural, publicly funded systems.

After the system is established, the rural community plays an important role in creating an environment that fosters use of the system. The community can cooperate with the provider in extending community resources to maximize ridership through the use of

school and other community facilities for senior citizen meals, sharing drivers across several programs, and allowing the use of schoolbuses for summer youth programs.

In both public and private rural passenger transportation systems, people living in local communities need to work in conjunction with the carrier/provider to make the service easy to use and responsive to local demand. The carrier/provider, in turn, can work with local communities to improve the image of public transportation through effective marketing. In response to local input, the carrier can make the service more attractive and convenient. The carrier can, for example, work with service industries, local businesses, and manufacturers to develop a service that meets local travel needs.

Defined Government Roles

Continuity and sustained commitment are key to community participation in rural passenger transportation. Establishment of a transportation system alone does not guarantee success. Only continuous, sustained community involvement can assure residents of the long-term availability of passenger transportation.

Federal, State, and local governments each have a role in rural passenger transportation. Since each role is currently in a state of flux, discussion by symposium participants focused on how each level of government can effectively foster passenger transportation for rural areas.

Symposium participants agreed that the Federal Government has a role in rural passenger transportation. While the primary Federal role in the past has been the development and funding of programs, the need today is for a facilitator to bring together the providers and users of rural transportation. Since rural passenger transportation involves a variety of transportation, human service, and rural concerns, the Federal government can develop communication channels among appropriate groups to ensure cooperation among publicly funded transportation systems and among private and public providers and users of the service to help ensure rural residents access to transportation.

A second Federal role is that of coordinating a national policy that includes rural passenger transportation. Participants saw the Federal Government as working in conjunction with States, localities, and the private sector in developing such a national policy and in implementing nationally coordinated strategies for transportation.

States are closer to the communities and more directly involved with rural passenger transportation than is the Federal government, and thus are in a better position to take a more active role and create an environment that encourages the development of rural transportation. State strategies that promote rural transportation include formulating management plans, fostering coordination among publicly funded providers and with the private sector, representing State rural passenger transportation interests in national forums such as Transportation 2020, and increasing public awareness of passenger issues facing rural residents.

Local governments are often themselves the providers of transportation and can provide information about the local community and practical experience in the development of local transportation systems. Many times local governments have hands-on knowledge of local transportation needs, and can translate that knowledge into responsive transportation service. Since local governments are on the front line, they also are best able to detect changes in rural passenger transportation needs, which is necessary for State planning purposes and modification of program or funding priorities.

Symposium participants saw the Federal, State, and local governments as each playing a vital role in defining adequate rural passenger transportation. State and local input were seen as indispensable in formulating national policy, while local talent was necessary to carry out national strategies.

Linking of Services

A variety of transportation services are available in rural America. Yet, many times, services cannot be accessed or used effectively because they are not linked into an intercity transportation system. A local, publicly funded provider may transport rural residents within a county, but those residents will not be able to use the intercity bus that runs through the county seat because the local provider does not connect with the bus schedule. To create a transportation "system" out of the available services offered requires that linkages be developed. Symposium participants pointed to two aspects of those linkages.

The first aspect involves a feeder concept. Rural local providers bring passengers into the intercity system where they can link into the intercity network. The approach can be described as a "hub and spoke" system where vans or smaller vehicles transport passengers from low-density areas to higher density areas to connect with a regional or national network. The feeder concept also involves freight transportation, such as package express service. Increasingly, products are being shipped in small batches on demand rather than in bulk containers, and hence can be moved in conjunction with passengers in and out of low-density areas.

The second aspect addresses intermodal linkages. Most intercity trips today involve intermodal connections. Buses can link with air, rail, ferry, private automobiles, taxicabs, or other buses. Since buses are an inherently more flexible form of transportation, they can easily link with other modes to provide a transportation network. Participants urged that incentives for intermodal cooperation be identified, and suggested that a wide range of carriers be considered as potential intermodal partners. Common carriers, regional airlines, Amtrak, public transit, taxis, schoolbuses, contract carriers, Indian reservations, rural mail carriers, and less-than-truck-load freight carriers were presented as potential intermodal operators for rural transportation.

Market Reseach and Development

A persistent theme among symposium participants focused on the lack of information on rural transportation needs. Participants agreed that information available about rural passenger transportation is inadequate, and that filling the information gap will involve both the public and private sectors. Little national factual data exists that

describes ridership, user characteristics, and user patterns. Needs assessments that evaluate onboard and demographic surveys of current users would describe the existing market for intercity service, while needs assessments utilizing demographic categories of potential users would describe potential markets. Without such data, it is difficult to conduct market analyses to determine the market for ridership potential. Currently, there is no clearinghouse or agency responsible for collecting information on rural intercity passenger transportation, whether it be user characteristics, service patterns, or rural service need.

New patterns of data collection, however, appear to be emerging. Coordination and publication of joint schedules among transit providers, intercity bus, rail, and air, would facilitate intermodal ridership and would possibly increase use of public transportation. Such coordination and publicity are already occurring in the Greyhound Rural Connection program. Transit operators connecting with Greyhound now have their schedules published in *Russell's Guide*, a nationwide listing of intercity carrier schedules.

However, participants also cautioned that no national study can correctly predict ridership on a particular route. Each route needs to be examined carefully to determine potential ridership, a process that requires local input and local involvement. Rather, a consistent approach for determining the need for rural services is needed to enable both public and private carriers to gauge service levels more accurately before implementing new routes.

Diversification of Funding Sources

Marketing is a critical element in any service. Participants identified marketing as essential to the success of any passenger transportation service, whether it be a local system or an intercity carrier. Lack of public awareness of available transportation services is seen as limiting ridership. Participants saw marketing as a joint responsibility involving the public and private sectors. In marketing intercity bus service, for example, both the intercity carriers and the communities receiving bus service are responsible for promoting and publicizing services. States can be involved in publicizing transportation service through a variety of methods, including public service announcements, fliers, and brochures. Joint marketing can be undertaken by States in conjunction with intercity carriers when locally-, regionally-, and State-funded transportation systems link into the intercity network. States and carriers can also promote greater use of intermodal services such as train-bus links through publicity and/or discounted fares offered through employers.

No one level of government or private industry was seen as solely responsible for providing adequate funding for rural passenger transportation. Rather, funding was seen to be a joint effort involving Federal, State, and local levels of government as well as private participation. The process necessary to identify transportation needs and locate funding sources to meet those needs involves both public and private sectors, since each can benefit from transportation services in rural areas.

The need to consolidate all available funding resources, both public and private, was emphasized by symposium participants. Greater flexibility in mixing funding sources is

necessary to provide transportation to more rural residents. Transportation-related dollars should be identified and constraints on their use detailed, with due consideration given to rewriting restrictive laws and regulations to allow greater flexibility. A greater diversity of matching funds should be developed, and private-sector contributions should be solicited. Consideration should be given to developing a "mobility" block grant program similar in concept to other existing block grant programs, with the monies designated for personal mobility. Such a grant to the States would allow maximum flexibility in designing programs tailored to local passenger transportation needs.

Federal funding was discussed in the context of existing programs, including Section 18 and Section 16(b)(2) as primary funding programs for rural passenger transportation. Human service funds for transportation were seen as an essential component in overall rural passenger transportation resources. And coordination of existing Federal funds with available State, local, and private resources was deemed critical to providing effective rural passenger transportation.

Resource Management

As resources available for rural passenger transportation have tightened, flexible approaches to managing become more critical. While community participation, public-private cooperation, and linking of services involve flexible ways of organizing resources, internal managerial flexibility is becoming a way of life for many rural passenger transportation providers. Internal flexibility implies an increased sensitivity to market changes, environmental conditions, and funding options and the ability to adjust to those changes without reducing service levels. It also means maximizing utilization of local resources to enhance services without incurring additional costs.

Examples of such flexibility range from the use of schoolbus facilities for maintenance and repair of rural-provider vehicles to cooperative arrangements among local rural providers for billing, procurement, bookkeeping, and repairs. Contracting vehicles out to local organizations for tours or special trips is another example of managerial response to local market conditions.

The use of information technologies makes such resource management possible. These technologies are utilized by many transit systems. Computers are used to develop, maintain, and readily access client records and community equipment to schedule and adjust trips to meet the client's needs.

Identification and Elimination of Barriers

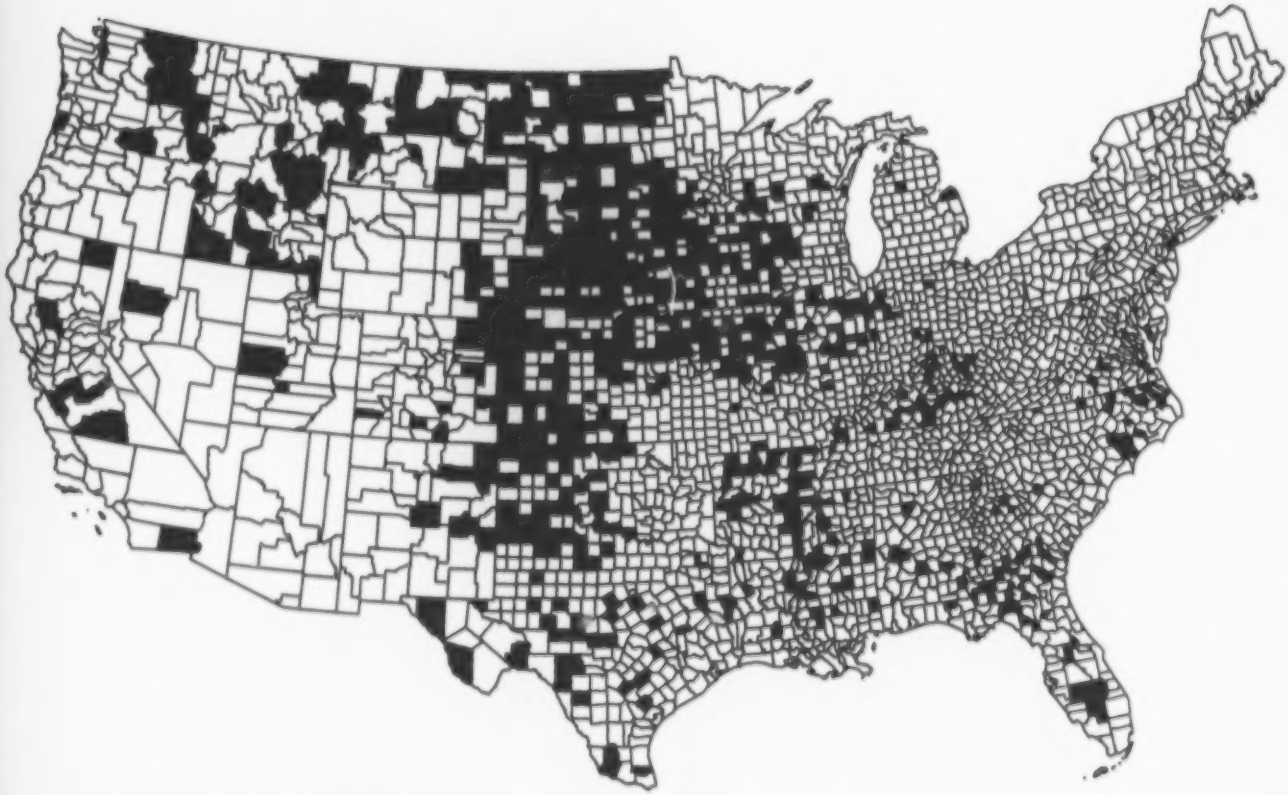
Symposium participants identified restrictive laws, regulations, and rules as barriers to the coordination and provision of rural passenger transportation. Those restrictive measures should be identified at the Federal, State, and local levels and rewritten to facilitate the provision of transportation to rural residents. States already committed to coordination of rural passenger transportation resources have found significant barriers to coordination within existing rules and regulations. While some restrictions relating to required service levels for special populations may be necessary, blanket prohibitions on vehicles and/or funding sources reduce the number of rural residents having access to transportation services.

The identification and revision of restrictive measures could be undertaken by a task force familiar with current processes and programs. Such a task force would include "local" experts involved with program operation who have an awareness of the statutory barriers limiting the provision of transportation services.

The review of restrictive measures also would include an examination of constraints on transportation funding, along with recommendations on removing those constraints and streamlining funding procedures. A policy that encourages cross-matching of resources would allow maximum utilization of all available public funding for rural passenger transportation. Many restrictions are geographic, limiting local providers to specific jurisdictions. Crossing of jurisdictional boundaries to facilitate intercity, intercounty, and interstate travel should be considered to ensure that the travel needs of rural residents are being met.

Figure 1

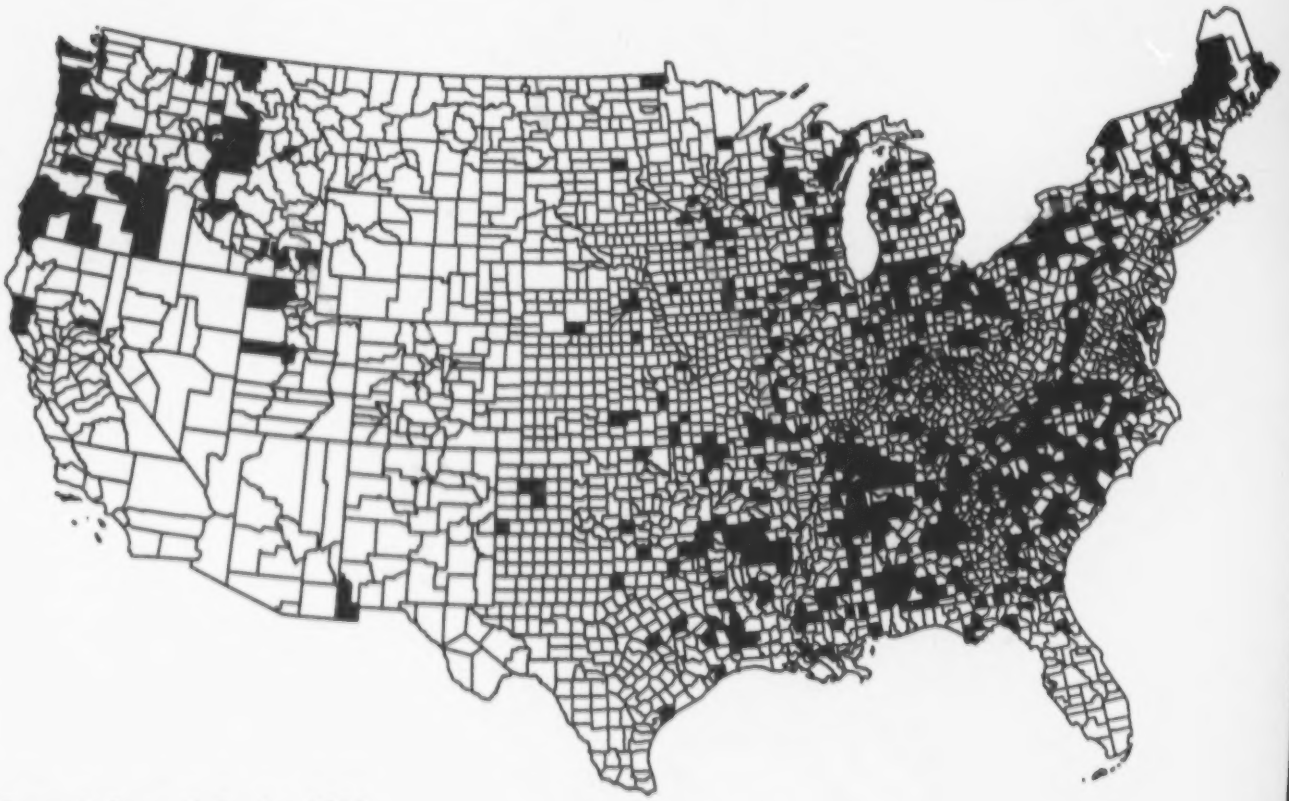
Farming-Dependent Counties in Nonmetro Areas, 1979



Economic Research Service, USDA

Figure 2

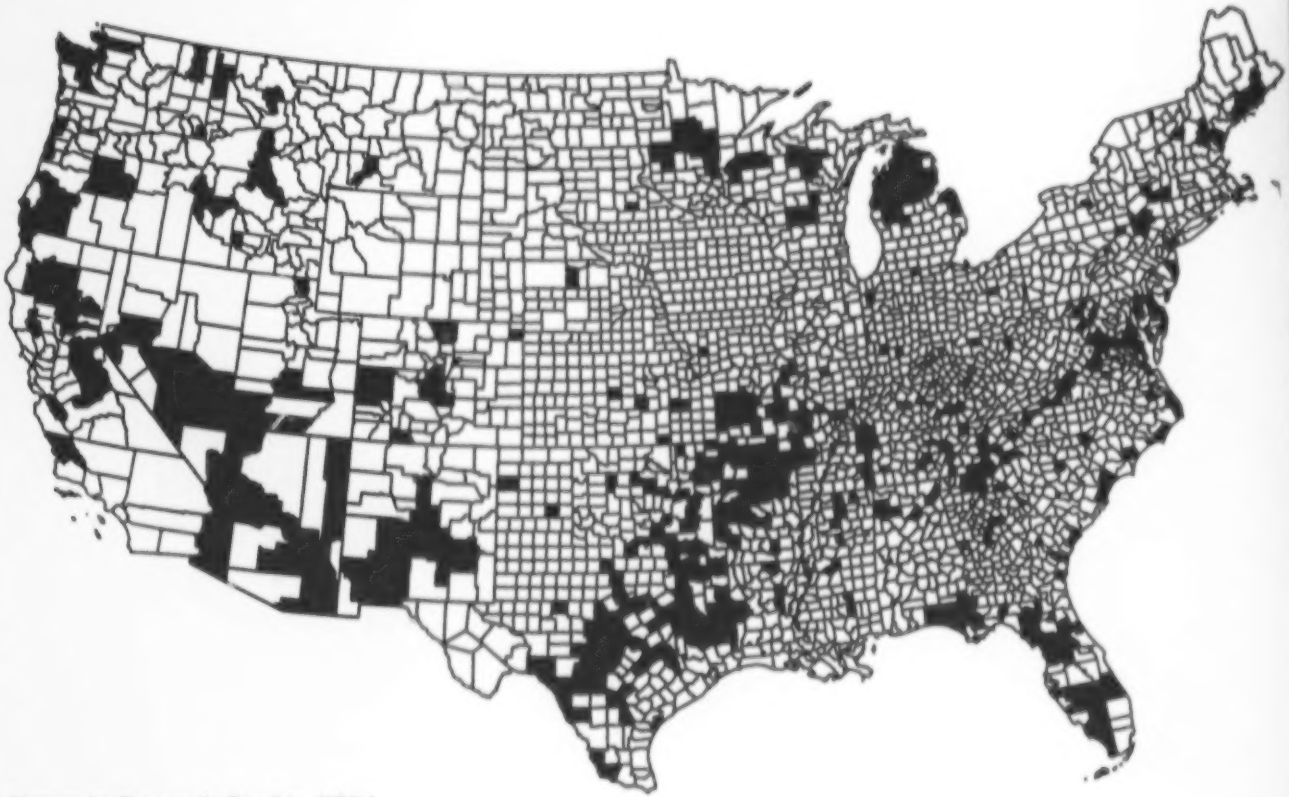
Manufacturing-Dependent Counties in Nonmetro Areas, 1979



Economic Research Service, USDA

Figure 3

Retirement-Destination Counties in Nonmetro Areas, 1979



Economic Research Service, USDA

APPENDIX

Table 1a—**North central region vehicle miles traveled**

State	Mileage 1975	Mileage 1986	Change	Percent change
		Millions		*Percent*
Illinois	57,273	74,144	16,871	29.45
Indiana	37,359	40,780	3,421	9.16
Iowa	17,853	20,413	2,560	14.34
Kansas	15,485	19,821	4,336	28
Michigan	58,173	71,981	13,808	23.7
Minnesota	25,624	33,806	8,182	31.9
Missouri	30,675	41,571	10,896	35.5
Nebraska	11,211	12,630	1,419	12.66
North Dakota	4,502	5,632	1,130	25.1
Ohio	64,134	81,348	17,214	26.8
South Dakota	5,186	6,238	1,052	20.29
Wisconsin	28,584	38,428	9,844	34.4
12-State total	356,059	446,792	90,733	25.48

Source: Data compiled from National Highway Traffic Safety Administration Reports, U.S. Department of Transportation.

Table 1b—**Northeast region vehicle miles traveled**

State	Mileage 1975	Mileage 1986	Change	Percent change
		Millions		*Percent*
Connecticut	18,234	24,053	5,819	31.9
Delaware	3,625	5,762	2,137	59.0
Dist. of Columbia	3,082	3,287	205	6.7
Maine	7,092	10,022	2,930	41.3
Maryland	25,186	35,208	10,022	39.8
Massachusetts	31,439	40,745	9,306	29.6
New Hampshire	5,290	7,913	2,623	49.6
New Jersey	48,445	55,350	6,905	14.3
New York	65,124	94,716	29,592	45.4
Pennsylvania	63,702	77,636	13,934	21.9
Rhode Island	5,660	5,429	-231	-4.1
Vermont	3,314	4,778	1,464	44.2
West Virginia	10,570	13,181	2,611	24.7
13-State total	290,763	378,080	87,317	30.0

Source: Data compiled from National Highway Traffic Safety Administration Reports, U.S. Department of Transportation.

Table 1c—**Southern region vehicle miles traveled**

State	Mileage 1975	Mileage 1986	Change	Percent change
		Millions		*Percent*
Alabama	24,838	34,003	9,165	36.9
Arkansas	13,943	17,555	3,612	25.9
Florida	61,715	87,273	25,558	41.4
Georgia	39,272	56,833	17,561	44.7
Kentucky	24,688	29,252	4,564	18.5
Louisiana	20,326	29,861	9,535	46.9
Mississippi	14,358	19,226	4,868	33.9
North Carolina	36,400	52,866	16,466	45.2
South Carolina	20,603	28,250	7,647	37.1
Tennessee	32,926	39,521	6,595	20.0
Virginia	34,641	51,726	17,085	49.3
11-State total	323,710	446,366	122,656	36.3

Source: Data compiled from National Highway Traffic Safety Administration Reports, U.S. Department of Transportation.

Table 1d—**Western region vehicle miles traveled**

State	Mileage 1975	Mileage 1986	Change	Percent change
		Millions		*Percent*
Arizona	15,983	22,665	6,682	41.8
California	132,600	214,913	82,313	62.0
Colorado	16,597	26,382	9,785	60.0
Idaho	5,873	7,781	1,908	32.5
Montana	5,723	7,737	2,014	35.2
Nevada	4,600	7,986	3,386	73.6
New Mexico	9,921	13,171	3,250	32.8
Oklahoma	22,724	30,833	8,109	35.7
Oregon	15,938	22,741	6,803	42.7
Texas	84,582	148,348	63,766	75.4
Utah	7,942	12,100	4,158	52.4
Washington	24,023	35,993	11,970	49.8
Wyoming	3,920	5,373	1,453	37.1
13-State total	350,426	556,023	205,597	55.4

Source: Data compiled from National Highway Traffic Safety Administration Reports, U.S. Department of Transportation.

Table 2a—**Air service in the north central region**

Hubs by size and location	Rank	1986 Boardings
Large hubs in region		
Chicago, O'Hare	1	26,113,612
St. Louis, Mo, Lambert	12	10,205,789
Detroit, MI, DMA	14	8,880,890
Minneapolis, MN	15	8,471,780
Medium hubs		
Kansas City, MO	31	4,133,506
Cleveland, OH	34	3,325,955
Dayton, OH	43	2,224,771
Indianapolis, IN	46	2,129,477
Chicago, IL — Midway	55	1,719,872
Milwaukee, MI	56	1,686,220
Columbus, OH	57	1,675,802
Omaha, NE	71	1,130,349
Small hubs		
Des Moines, IA	82	746,275
Wichita, KS	85	686,933
Grand Rapids, MI	89	617,895
Madison, WI	101	462,900
Cedar Rapids, IA	109	392,293
Fort Wayne, IN	123	310,826
Toledo, OH	124	308,069
Moline, IL - Quad City	125	301,366
South Bend, IN	127	285,119
Sioux Falls, SD	130	268,288
Lincoln, NE	131	264,533
Green Bay, WI	133	257,527
Evansville, IN	137	247,358
Akron, OH	139	245,993
Springfield, MO	140	245,067
Fargo, ND	141	233,559
Peoria, IL	144	222,507

Source: U.S. Department of Transportation, TSC Calendar '86 ACIS Database, "U.S. Airport Enplanement Activity Summary for CY 1986 Listed by Rank Order and Enplanement," October 1987.

Table 2b—**Air service in the northeast region**

Hubs by size and location	Rank	1986 Boardings
Large hubs in region		
Newark, NJ	6	14,875,742
New York, John F. Kennedy	8	13,269,911
New York, La Guardia	9	11,057,825
Boston, MA	10	10,818,796
Pittsburgh, PA	16	7,971,364
Wash., DC, Washington National	20	6,960,133
Philadelphia, PA	21	6,388,868
Medium hubs		
Baltimore, MD	30	4,402,377
Windsor Locks, CT	48	2,068,817
Buffalo, NY	53	1,761,700
Syracuse, NY	65	1,424,492
Rochester, NY	68	1,277,358
Small hubs		
Albany, NY	75	909,774
Providence, RI	78	827,558
Middletown, PA, Harrisburg Int.	98	509,183
Islip, NY	100	484,775
Burlington, VT	103	448,570
Allentown, PA	121	314,763
White Plains, NY	132	260,843
Charleston, WV	135	253,102

Source: U.S. Department of Transportation, TSC Calendar '86 ACIS Database, "U.S. Airport Enplanement Activity Summary for CY 1986 Listed by Rank Order and Enplanement," October 1987.

Table 2c—**Air service in the southern region**

Hubs by size and location	Rank	1986 Boardings
Large hubs in region		
Atlanta, GA	2	22,572,709
Miami, FL	11	10,755,175
Orlando, FL	22	6,258,675
Charlotte/Douglas, NC	24	5,999,245
Tampa, FL	26	4,787,256
Memphis, TN	28	4,471,731
Dulles Int., VA	29	4,442,755
Medium hubs		
Fort Lauderdale, FL	32	3,932,531
New Orleans, LA	35	3,257,537
Covington, KY	40	2,370,470
Nashville, TN	42	2,280,354
West Palm Beach, FL	49	2,058,505
Norfolk, VA	58	1,642,577
Raleigh-Durham, NC	62	1,478,398
Jacksonville, FL	66	1,409,622
Small hubs		
Greensboro, NC	72	1,045,967
Fort Myers, FL	73	1,034,649
Louisville, KY	74	1,032,461
Richmond, VA	76	870,579
Little Rock, AR	77	836,610
Birmingham, AL	80	762,709
Sarasota-Bradenton, FL	86	671,953
Charleston, SC	87	654,728
Columbia, SC	88	640,942
Knoxville, TN	94	534,422
Savannah, GA	99	507,359
Greer, SC	102	462,831
Jackson, MS	108	410,721
Lexington, KY	110	392,293
Baton Rouge, LA	111	391,059
Pensacola, FL	112	370,421
Huntsville, AL	113	366,149
Tallahasee, FL	114	365,355
Mobile, AL	118	333,125
Shreveport, LA	119	332,49
Roanoke, VA	120	322,393
Daytona Beach, FL	122	312,224

Table 2c—**Air service in the southern region—Continued**

Hubs by size and location	Rank	1986 Boardings
Small hubs		
Chattanooga, TN	128	284,415
St. Petersburg, FL	134	255,988
Myrtle Beach, SC	142	232,754
Melbourne, FL	143	226,227

Source: U.S. Department of Transportation, TSC Calendar '86 ACIS Database, "U.S. Airport Enplanement Activity Summary for CY 1986 Listed by Rank Order and Enplanement," October 1987.

Table 2d—**Air service in the western region**

Hubs by size and location	Rank	1986 Boardings
Large hubs in region		
Los Angeles, CA	3	20,140,782
Dallas-Fort Worth, TX	4	19,996,042
Denver, CO	5	16,787,582
San Francisco, CA	7	13,630,694
Phoenix, AZ	17	7,840,574
Seattle, WA, Seattle-Takoma	18	7,057,860
Houston, TX	19	7,045,179
Los Vegas, NV	23	6,066,794
Salt Lake City, UT	25	4,797,351
San Diego, CA	27	4,606,064
Medium hubs		
Houston, TX	33	3,730,576
San Jose, CA	37	2,925,469
Dallas, TX	38	2,735,230
Portland, OR	39	2,518,280
San Antonio, TX	41	2,325,250
Albuquerque, NM	45	2,179,852
Ontario, CA	47	2,071,657
Santa Ana, CA	50	1,997,976
Oakland, CA	51	1,901,066
Austin, TX	52	1,837,580
Sacramento, CA	54	1,730,116
Reno, NV	59	1,587,944
Oklahoma City, OK	60	1,503,162
Burbank, CA	61	1,480,006
Small hubs		
Tucson, AZ	64	1,425,645
Tulsa, OK	67	1,392,659
El Paso, TX	69	1,240,393
Spokane, WA	81	752,073
Colorado Springs, CO	83	728,380
Boise, ID	90	592,242
Midland, TX	92	565,851
Long Beach, CA	93	560,703
Lubbock, TX	96	531,079
Amarillo, TX	104	434,136
Fresno, CA	105	434,130
Corpus Christi, TX	106	428,392
Harlingen, TX	107	411,732
Palm Springs, CA	115	364,760
Billings, MT	117	340,983
Santa Barbara, CA	126	290,332
Eugene, OR	129	278,765
Monterey, CA	138	246,111

Source: U.S. Department of Transportation, TSC Calendar '86 ACIS Database, "U.S. Airport Enplanement Activity Summary for CY 1986 Listed by Rank Order and Enplanement," October 1987.

Table 3a—**Essential Air Service Program Detail—north central region**

State and points served	Subsidy 1986	Subsidy per passenger	Percent of fare
	Dollars		*Percent*
Illinois			
Mt. Vernon	286,610	57	95.0
Sterling	248,011	66	120.0
	534,621		
Indiana			
Kokomo	338,602	121	142.4
Iowa			
Clinton	274,211	274	472.4
Ottumwa	274,211	137	142.7
	548,422		
Kansas			
Dodge City	167,094	24	22.2
Garden City	167,094	11	8.3
Goodland	167,094	55	46.2
Great Bend	167,094	23	17.5
Hays	167,094	13	9.8
Hutchinson	167,094	95	237.5
Independence	167,094	87	104.8
Liberal	167,094	14	10.1
	1,336,752		
Michigan			
Manistee	371,077	N.A	N.A.
Menominee	371,077	241	22.1
Jackson	249,678	236	481.6
Sault Ste. Marie	242,953	58	34.7
	1,234,785		
Minnesota			
Mankato	142,668	53	106.0
Worthington	142,668	76	110.1
Thief River Falls	91,066	10	12.5
	376,402		
Missouri			
Kirksville	424,991	147	213.0
Nebraska			
Alliance	125,536	63	70.0
Chadron	125,536	58	55.2

Table 3a—**Essential Air Service Program Detail—north central region—Continued**

State and points served	Subsidy 1986	Subsidy per passenger	Percent of fare
	Dollars		*Percent*
Sidney	125,536	62	72.9
Columbus	230,774	171	371.7
Norfolk	230,774	61	105.2
Hastings	294,908	79	133.9
Kearney	294,908	36	38.7
McCook	294,908	67	58.3
	1,722,880		
North Dakota			
Williston	193,674	13	11.9
Devils Lake	355,949	150	147.1
Jamestown	355,949	53	58.9
	905,572		
South Dakota			
Brookings	145,871	22	22.0
Huron	145,871	25	21.9
Mitchell	145,871	58	50.9
Yankton	230,774	116	200.0
	668,387		
Wisconsin			
Manitowoc	371,077	515	578.7
Beloit/Janesville	261,050	N.A.	N.A.
	632,127		

N.A.: Not applicable

Source: U.S. Department of Transportation, *Report to Congress on Subsidized Air Service under the Essential Air Service Program - Section 419 of the Federal Aviation Act,* February 1987.

Table 3b—**Essential Air Service Program detail—northeast region**

State and points served	Subsidy 1986	Subsidy per passenger	Percent of fare
		Dollars	*Percent*
Maine			
Lewiston/Auburn	209,092	160	152.4
New York			
Watertown	187,271	19	34.5
Saranac Lake	187,271	17	21.3
Plattsburgh	187,271	14	19.7
Ogdensburg	187,271	32	41.6
Massena	187,271	29	33.0
	936,355		
Pennsylvania			
Oil City	128,504	8	8.9
Vermont			
Montpelier	188,191	104	102.0
West Virginia			
Elkins	401,981	166	212.8
Bluefield	266,386	50	43.5
Beckley	266,386	32	29.1
Morgantown	128,830	23	26.7
Clarksburg	128,830	30	34.9
	1,192,413		

Source: U.S. Department of Transportation, *Report to Congress on Subsidized Air Service under the Essential Air Service Program - Section 419 of the Federal Aviation Act*, February 1987.

Table 3c—**Essential Air Service Program detail—southern region**

State and points served	Subsidy 1986	Subsidy per passenger	Percent of fare
	Dollars		Percent
Alabama			
Gadsden	161,547	53	52.0
Arkansas			
Harrison	326,218	80	58.8
Hot Springs	287,394	52	102.0
El Dorado	287,394	54	63.5
Jonesboro	93,787	17	27.9
	994,793		
Georgia			
Moultrie	427,211	269	271.7
Athens	197,029	11	17.7
	624,240		
North Carolina			
Rocky Mount	147,222	136	161.9
Winston-Salem	95,328	11	16.2
	242,550		
Tennessee			
Clarksville	292,402	167	575.9
Virginia			
Danville	217,856	46	70.8
Hot Springs	118,960	29	30.5
	336,816		

Source: U.S. Department of Transportation, *Report to Congress on Subsidized Air Service under the Essential Air Service Program - Section 419 of the Federal Aviation Act*, February 1987.

Table 3d—**Essential Air Service Program detail—western region**

State and points served	Subsidy 1986	Subsidy per passenger	Percent of fare
		Dollars	*Percent*
Arizona			
Kingman	298,260	48	100.0
Winslow	203,654	172	419.5
Page	163,383	19	15.1
	665,297		
California			
Blythe	355,378	147	241.0
Crescent City	284,324	109	99.1
Santa Rosa	213,973	80	235.3
Visalia	156,267	8	9.5
Merced	156,267	11	13.8
	1,166,209		
Colorado			
Lamar	167,094	57	47.9
Montana			
Wolf Point	193,674	57	55.3
Sidney	193,674	35	31.5
Miles City	193,674	85	100.0
Lewistown	193,674	164	278.0
Havre	193,674	85	84.2
Glendive	193,674	73	71.6
Glasgow	193,674	48	48.5
West Yellowstone	71,406	14	11.7
	1,427,124		
Nevada			
Ely	386,332	86	78.2
New Mexico			
Alamogordo	201,604	21	35.6
Gallup	167,491	23	33.3
Silver City	104,479	21	26.6
Hobbs	78,828	8	10.1
Carlsbad	78,828	3	4.3
	631,230		

Table 3d—**Essential Air Service Program Detail—western region—Continued**

State and points served	Subsidy 1986	Subsidy per passenger	Percent of fare
	Dollars		*Percent*
Oklahoma			
Ponca City	223,734	92	230.0
McAlester	223,734	221	491.1
Enid	223,734	110	244.4
	671,202		
Oregon			
Salem	182,775	88	187.2
Texas			
Temple	254,099	18	29.0
Paris	254,099	154	265.5
Brownwood	254,099	69	111.3
	762,297		
Utah			
Cedar City	178,304	15	18.5
Moab	172,930	153	191.3
	351,234		
Washington			
Ephrata/Moses Lake	164,336	32	42.7
Wyoming			
Worland	352,655	67	55.8

Source: U.S. Department of Transportation, *Report to Congress on Subsidized Air Service under the Essential Air Service Program - Section 419 of the Federal Aviation Act*, February 1987.

Table 4a—Changes in bus service in the north central region following deregulation

State	Number of points losing service by 11/83 (M.C.R.M.S.C.)[1]	Annual loss (Fully Allocated) (Dollars)[1]	Number of points losing service by 1/86 (I.C.C.)[2]	Percent decline from 1982	Number of points with new service by 1/86
Illinois	98	384,351	232	14	5
Indiana	96	726,343	162	21	12
Iowa	57	N.D.	119	10	13
Kansas	31	75,232	115	15	11
Michigan	172	N.D.	235	31	10
Minnesota	91	777,617	153	15	10
Missouri	114	80,094	216	20	4
Nebraska	12	96,741	45	3	1
North Dakota	31	N.D.	44	11	1
Ohio	101	781,275	201	17	6
South Dakota	9	N.D.	21	4	2
Wisconsin[3]	N.A.	N.D.	147	17	6
	812	2,921,653	1,690		81

N.A.: Not applicable
N.D.: No data available

[1] Motor Carrier Ratemaking Study Commission, *A Report to the President and the Congress of the United States: Part Two - Implementation of the Bus Regulatory Reform Act of 1982: The Impact on Older Americans and the Effect on Intrastate Bus Services*, May 1984.

[2] "I.C.C. assesses Bus Regular Route Entry and Exit," ICC News, Sept. 8, 1986. (Study in response to a request from Senator Pressler)

[3] State deregulated prior to Federal deregulation, so no service losses attributable to BRRA.

Table 4b—**Changes in bus service in the northeast region following deregulation**

State	Number of points losing service by 11/83 (M.C.R.M.S.C.)[1]	Annual loss (Fully Allocated) (Dollars)[1]	Number of points losing service by 1/86 (I.C.C.)[2]	Percent decline from 1982	Number of points with new service by 1/86
Connecticut	17	N.D.	25	11	1
Delaware	3	N.D.	4	6	0
District of Columbia	0	N.D.	1	N.D.	0
Maine	50	346,271	59	40	7
Maryland	8	N.D.	41	10	0
Massachusetts	16	N.D.	36	2	6
New Hampshire	7	N.D.	20	24	0
New Jersey	6	N.D.	148	26	0
New York	37	920,966	102	3	34
Pennsylvania	41	341,873	167	9	20
Rhode Island	2	N.D.	12	36	0
Vermont	1	N.D.	8	1	0
West Virginia	76	N.D.	87	30	1
	264	1,609,110	710	69	

N.D.: No data available

[1] Motor Carrier Ratemaking Study Commission, *A Report to the President and the Congress of the United States: Part Two - Implementation of the Bus Regulatory Reform Act of 1982: The Impact on Older Americans and the Effect on Intrastate Bus Services*, May 1984.

[2] "I.C.C. assesses Bus Regular Route Entry and Exit," ICC News, Sept. 8, 1986. (Study in response to a request from Senator Pressler)

Table 4c—**Changes in bus service in the southern region following deregulation**

State	Number of points losing service by 11/83 (M.C.R.M.S.C.)[1]	Annual loss (Fully Allocated) (Dollars)[1]	Number of points losing service by 1/86 (I.C.C.)[2]	Percent decline from 1982	Number of points with new service by 1/86
Alabama	47	1,418,339	81	11	5
Arkansas	43	N.D.	115	18	8
Florida[3]	0	N.D.	80	5	2
Georgia	48	3,759,833	78	10	4
Kentucky	62	N.D.	102	20	3
Louisiana	43	N.D.	79	12	7
Mississippi	30	N.D.	58	14	4
North Carolina	59	590,175	140	19	11
South Carolina	32	N.D.	67	14	7
Tennessee	67	1,906,238	96	21	7
Virginia	141	N.D.	162	40	2
	572	7,674,585	1,058	60	

N.D.: No data available

[1] Motor Carrier Ratemaking Study Commission, *A Report to the President and the Congress of the United States: Part Two - Implementation of the Bus Regulatory Reform Act of 1982: The Impact on Older Americans and the Effect on Intrastate Bus Services*, May 1984.

[2] "I.C.C. assesses Bus Regular Route Entry and Exit," ICC News, Sept. 8, 1986. (Study in response to a request from Senator Pressler)

[3] State deregulated prior to Federal deregulation, so no service losses attributable to BRRA.

Table 4d—**Changes in bus service in the western region following deregulation**

State	Number of points losing service by 11/83 (M.C.R.M.S.C.)[1]	Annual loss (Fully Allocated) (Dollars)[1]	Number of points losing service by 1/86 (I.C.C.)[2]	Percent decline from 1982	Number of points with new service by 1/86
Arizona[3]		N.D.	37	16	5
California	124	165,582	158	15	6
Colorado	24	N.D.	82	25	3
Idaho	27	N.D.	59	21	3
Montana	10	N.D.	61	15	8
Nevada	29	N.D.	31	23	4
New Mexico	12	N.D.	47	28	8
Oklahoma	68	252,774	161	21	13
Oregon	48	309,024	65	13	11
Texas	100	N.D.	222	13	90
Utah	20	N.D.	39	14	0
Washington	29	N.D.	55	10	5
Wyoming	14	N.D.	39	35	1
	586	727,380	1,148	159	

N.D.: No data available

1 Motor Carrier Ratemaking Study Commission, *A Report to the President and the Congress of the United States: Part Two - Implementation of the Bus Regulatory Reform Act of 1982: The Impact on Older Americans and the Effect on Intrastate Bus Services*, May 1984.

2 "I.C.C. assesses Bus Regular Route Entry and Exit," ICC News, Sept. 8, 1986. (Study in response to a request from Senator Pressler)

3 State deregulated prior to Federal deregulation, so no service losses attributable to BRRA.

Table 5a—Summary of rural public transportation in the north central region

State	Number of agencies Section 18	Number of agencies 16 (b) (2)	Sub-contractors	Total agencies	Total number of vehicles
			Number		
Illinois	13	44	2	59	388
Indiana	19	86	10	115	733
Iowa	23	0	25	48	557
Kansas	42	74	2	118	544
Michigan	51	45	5	101	860
Minnesota	36	70	9	115	495
Missouri	31	94	6	131	769
Nebraska	57	31	1	89	219
North Dakota	18	43	1	62	144
Ohio	28	262	12	302	1,447
South Dakota	14	48	0	62	175
Wisconsin	31	92	8	131	641
	363	937	81	1,333	6,972

Source: U.S. Department of Transportation, *A Directory of Rural and Specialized Transit Operators*, Volumes 2 and 3, June 1986.

Table 5b—Summary of rural public transportation in the northeast region

State	Number of agencies Section 18	Number of agencies 16 (b) (2)	Sub-contractors	Total agencies	Total number of vehicles
			Number		
Connecticut	9	39	6	54	450
Delaware	2	21	0	23	127
Dist. of Columbia	0	13	0	13	59
Maine	15	1	0	16	148
Maryland	7	64	1	72	617
Massachusetts	12	67	7	86	675
New Hampshire	4	34	3	41	321
New Jersey	13	110	7	130	746
New York	55	53	6	114	2,335
Pennsylvania	19	64	9	92	1,089
Rhode Island	1	20	1	22	136
Vermont	4	27	3	34	156
West Virginia	12	69	1	82	461
	153	582	44	779	7,320

Source: U.S. Department of Transportation, *A Directory of Rural and Specialized Transit Operators, Volumes 2 and 3,* June 1986.

Table 5c—**Summary of rural public transportation in the southern region**

State	Number of agencies Section 18	Number of agencies 16 (b) (2)	Sub-contractors	Total agencies	Total number of vehicles
			Number		
Alabama	33	12	0	45	465
Arkansas	7	93	13	113	913
Florida	24	127	12	163	1,185
Georgia	35	50	4	89	738
Kentucky	19	45	6	70	715
Louisiana	36	66	3	105	546
Mississippi	17	70	3	90	611
North Carolina	21	90	1	112	954
South Carolina	9	79	1	89	800
Tennessee	13	128	1	142	1,108
Virginia	12	29	0	41	543
	226	789	44	1,059	8,578

Source: U.S. Department of Transportation, *A Directory of Rural and Specialized Transit Operators, Volumes 2 and 3*, June 1986.

Table 5d—**Summary of rural public transportation in the western region**

State	Number of agencies Section 18	Number of agencies 16 (b) (2)	Sub-contractors	Total agencies	Total number of vehicles
			Number		
Arizona	11	61	3	75	418
California	94	204	20	318	3,191
Colorado	20	25	2	47	425
Idaho	6	46	0	56	164
Montana	9	52	2	63	137
Nevada	6	40	0	46	187
New Mexico	26	43	0	69	379
Oklahoma	12	149	3	164	641
Oregon	19	43	6	68	324
Texas	29	171	12	212	1,203
Utah	4	44	3	51	189
Washington	32	19	0	51	1,244
Wyoming	5	27	3	35	110
	273	924	54	1,255	8,612

Source: U.S. Department of Transportation, *A Directory of Rural and Specialized Transit Operators, Volumes 2 and 3*, June 1986.

Table 6a—State and Federal funding for operations in the north central region for rural and small city public transportation—FY 1986

Operating State	State Section 18	Local operating	Other operating	Totals	State*
			Dollars		
Illinois	2,212,719	0	0	2,212,719	50,000
Indiana	1,772,129	978,846	793,288	3,544,263	1,002,051
Iowa	784,433	1,711,736	2,504,397	5,000,566	2,110,077
Kansas	1,074,234	0	1,450,218	2,524,452	0
Michigan	3,111,900	7,488,714	5,273,754	15,874,368	15,563,544
Minnesota	1,650,000	1,925,500	774,500	4,350,000	3,012,500
Missouri	1,984,258	0	1,324,543	3,308,801	0
Nebraska	625,162	481,718	661,160	1,768,040	481,718
North Dakota	282,571	0	368,622	651,193	0
Ohio	3,612,000	1,050,000	1,234,000	5,896,000	1,050,000
South Dakota	433,842	0	215,742	649,584	0
Wisconsin	1,657,730	1,460,133	288,936	3,406,799	1,623,421
	19,200,978	15,096,647	14,889,160	49,186,785	24,893,311

*FY 1987 data

Note: States providing funding for intercity bus service in FY 1987:

Michigan	$5,778,300

Source: American Association of State Highway and Transportation Officials, *1987 Survey of State Involvement in Public Transportation.*

Table 6b—State and Federal funding for operations in the northeast region for rural and small city public transportation—FY 1986

Operating	State Section 18	Local Operating	Other Operating	Totals	State*
			Dollars		
Connecticut	676,000	409,000	175,000	1,260,000	230,895
Delaware	27,510	27,510	0	55,020	47,502
District of Columbia	0	0	0	0	0
Maine	599,404	137,032	0	736,436	148,006
Maryland	0	0	0	0	255,000
Massachusetts(a)	580,000	5,700,000	3,400,000	9,680,000	6,600,000
New Hampshire	599,926	0	374,799	974,725	0
New Jersey	334,653	167,326	167,326	669,305	455,131
New York	1,183,000	3,167,000	2,090,000	6,440,000	3,567,000
Pennsylvania	3,100,000	1,300,000	600,000	5,000,000	1,300,000
Rhode Island(b)	23,100	0	0	23,100	0
Vermont	261,981	57,527	225,039	544,547	89,827
West Virginia	994,438	465,381	665,766	2,125,585	465,381
	8,380,012	11,430,776	7,697,930	27,508,718	13,158,742

*FY 1987 data

(a) RTA only.
(b) General Funds are made up of 33 percent income taxes; 30 percent sales tax; 23 percent public utility taxes, personal property replacement taxes, and lottery and income fund receipts; and 14 percent is mde up of federal aid.

Note: States providing funding for intercity bus service in FY 1987:

Connecticut	$ 440,684	New York	$ 7,180,00
Delaware	60,000	Pennsylvania	1,250,000
Maine	50,000	Rhode Island	1,000
Massachusetts	6,100,000		

Source: American Association of State Highway and Transportation Officials, *1987 Survey of State Involvement in Public Transportation.*

Table 6c—State and Federal funding for operations in the southern region for rural and small city public transportation—FY 1986

Operating State	State Section 18	Local operating	Other operating	Totals	State*
			Dollars		
Alabama	1,285,200	0	642,600	1,927,800	315,000
Arkansas	1,879,599	104,337	598,030	2,581,966	224,735
Florida	1,892,000	200,000	200,000	2,292,000	454,000
Georgia	1,544,043	0	1,109,358	2,653,401	53,000
Kentucky	554,653	0	554,653	1,109,306	61,527
Louisiana	2,376,174	0	1,188,087	3,564,261	0
Mississippi	949,168	0	949,168	1,898,336	0
North Carolina	838,394	0	1,124,007	1,962,401	378,859
South Carolina	823,659	325,562	248,083	1,397,304	562,378
Tennessee	1,686,118	866,994	1,230,657	3,783,769	900,000
Virginia	1,053,374	471,641	420,195	1,945,210	1,291,315
	14,882,382	1,968,534	8,264,838	25,115,754	4,240,814

*FY 1987 data

Source: American Association of State Highway and Transportation Officials, *1987 Survey of State Involvement in Public Transportation.*

Table 6d—**State and Federal funding for operations in the western region for rural and small city public transportation—FY 1986**

Operating State	State Section 18	Local operating	Other operating	Totals	State*
			Dollars		
Arizona	384,527	0	402,414	786,941	0
California	1,874,771	11,170,449	0	13,045,220	18,204,287
Colorado	0	0	0	0	0
Idaho	680,765	0	350,665	1,031,430	0
Montana	357,334	0	357,334	714,668	0
Nevada	138,230	0	N.A.	138,230	9,000
New Mexico	342,000	0	342,000	684,000	0
Oklahoma	575,087	0	40	575,127	0
Oregon	422,000	232,000	1,721,000	2,375,000	313,663
Texas	9,425,000	435,000	2,320,000	12,180,000	230,000
Utah	68,000	38,000	771,000	877,000	185,000
Washington	200,000	3,191,000	4,027,000	7,418,000	4,566,000
Wyoming	345,257	0	290,019	635,276	74,000
	14,812,971	15,066,449	10,581,472	40,460,892	23,581,950

*FY 1987 data

N.A.: Not applicable

Note: States providing funding for intercity bus funding in FY 1987:

California - Included in public transit, separate data is not available.

Source: American Association of State Highway and Transportation Officials, *1987 Survey of State Involvement in Public Transportation.*

Process Employed

The symposia process was designed to gather grassroots input on rural passenger transportation needs and how those needs are being met in different parts of the country. Beyond gathering information, the process itself encouraged the exchange of ideas and experiences and the development of consensus regarding the needs, constraints, and strategies for rural passenger transportation.

The north central symposium held in Des Moines, Iowa, served as the pilot for the process which evolved throughout each symposium. Each symposium began with the formation of a regional planning committee. Members of the regional planning committees were identified as regional leaders by representatives of the National Rural Transportation Planning Committee, which is composed of the agencies and organizations listed in the Acknowledgments. To ensure broad representation of public and private organizations involved in rural passenger transportation, the regional planning committees included State departments of transportation, regional planning commissions, farm organizations, intercity carriers, user groups, rural public providers, and legislative representatiaves. Planning meetings were held in each region to develop an agenda, identify appropriate sepakers from the region to address each subject, select a site, and recommend a date for the symposium. Planning committee members participated in the planning meeting by making preliminary hotel arrangements, securing speakers, developing mailing lists of regional transportation contacts, and, in some cases, agreeing to be a speaker at the regional symposium.

Invitations were sent to a broad range of organizations and individuals involved in rural passenger transportation to encourage the development of a comprehensive understanding of rural passenger transportation. As can be seen in the topical agenda, each symposium followed a process that facilitated the development of goals, constraints, and strategies for rural intercity passenger transportation. The symposia began with presentations on structural changes occurring in rural America and their impact on rural passenger transportation. Discussion then focused on changes in the passenger transportation industry, particularly the effects of deregulation on rail, air, and intercity bus. Since intercity bus serves the greatest number of points in the rural areas, recent service changes were examined closely. Federal and State funding for intercity bus was outlined to round out the discussion.

Participants were then briefed on the workshop process being used to develop goals and constraints and divided into small groups. Each group had a facilitator who moderated the discussion and ensured that each person participated in the discussion. Each workshop developed a listing of the goals and constraints to present to the entire symposium. After all participants reviewed the workshop results, they "voted" for their preferred

goals and constraints. The subsequent ranking was provided to symposium participants for their review and consideration before the next part of the program began.

The second major component of the symposium focused on alternative solutions to rural passenger transportation. Two panels of speakers, one representing the private sector and the other representing publicly funded rural providers, gave presentations on service in rural areas. After the panel presentation, participants broke again into work groups to discuss strategies for implementing workable solutions for rural passenger transportation. The small groups then reassembled to review the strategies, and voted for those considered to be most appropriate or feasible. The symposium then concluded with summary remarks, which reemphasized the use of workshop output in developing a national strategy.

In summary, the symposia process encouraged the participation of a broad range of agencies and organizations involved in rural intercity passenger transportation. The planning process for each regional symposium brought in those individuals considered to be rural transportation leaders within their region. The symposia in turn brought together a wide variety of organizations concerned about rural passenger transportation, presented them with information on rural areas and current changes in the passenger transportation industry, and engaged them in workshop discussions about the difficulties facing transportation in rural areas. Throughout the symposia process, participants anticipated the use of their insights and information in developing a national policy for rural passenger transportation. That awareness fostered a keen sense of the need to cooperate with those involved in rural transportation to formulate a consensus approach to meeting rural mobility needs.

Agenda for Regional Symposium
on Rural Intercity Passenger Transportation

Day I (Evening)

Registration

Reception

Welcoming Remarks

Why Are We Here? What's to be Accomplished?

Meeting of Workshop Facilitators

Day 2

Registration

General Session
The Changing Demographic and Economic Base of Rural America: Its Impact on the Passenger Transportation Needs and Demand

- The Demographic and Economic Situation in Rural America
- The Impact of Structural Changes on Passenger Transportation Needs and Demand

Break

General Session
Intercity Bus Transportation: Deregulation and Service Changes since Deregulation

- Regulatory Reform of the Transportation Industry
- "End of the Line"—Loss of Service to Rural America
- Passenger Transportation and Changes in Intercity Bus Service since Deregulation in the Western Region
- State and Federal Funding for Intercity Bus Transportation

Lunch

General Session
Identifying Rural Passenger Transportation Goals and Constraints

The Participant's Role and Responsibility —
Rural Transportation Goals and Constraints

Workshops
Identification and Prioritization of Goals and Constraints

Closure

Day 3

General Session
Overview of the Alternative Solutions to Rural Passenger Transportation

Panel of speakers representing the intercity passenger transportation industry

Break

Panel of speakers representing local rural passenger transportation providers

Questions and Answers for Panel Members

Lunch - Devising Strategies for Implementing Workable Solutions

The Participant's Role and Responsibility — Strategies for Implementing
Workable Solutions to Rural Intercity Passenger Transportation

Workshops
Identification and Prioritization of Strategies

What's Been Achieved? Where Does This Effort Go?

Adjourn

Output for the North Central Region

Goals

Understand the market and provide service to meet the needs.

Develop a total financing plan that includes local, State, Federal, and private involvement; provides multimodal flexibility; and requires cost efficiency.

Ensure "community" involvement and participation.

Educate and promote service with the public.

Promote, insofar as possible, long-term survivability.

Provide "quality" service (e.g., safe, reliable, timely, clean, etc.). Identify intercity service as a "social" need (in the broadest sense).

Provide access by linking modes.

Establish cooperation between public and private sectors.

Facilitate economic development.

Constraints

Low priority for rural transit.

Difficult market to serve (high cost/low revenue).

Lack of funding sources.

Lack of public awareness.

Apathy toward rural transit at all levels.

Poor image.

Lack of consistent goals.

Lack of effective constituency.

Lack of user information available.

Resistance to change (by all organizations and agencies).

Intercity equipment lacks accessibility for disabled.

Strategies

Group 1:

1. Determine most appropriate (transit and nontransit public/private sector) market analysis techniques to generate a broad measure of intercity customer potential including innovative uses of intercity service beyond the current rider/shipper base.

2. Select optimum sites and propose service that meets market analysis findings including ongoing promotion and support led by a newly established user-support group.

3. Identify and organize regional support groups for input and development.

4. Mobilize local community for "hard" support (funding) and commitment.

   Note: Local community is defined in the broadest sense and may mean State, county, Nation.

5. Implement actual service.

Group 2:

1. Complete a comprehensive study and plan for rural intercity transportation (State and regional).

2. Contact all organizations impacting rural transportation for support.

3. Seek Congressional appropriation of funds for demonstration projects.

4. Hold summits (State by State) among all transportation providers.

5. Initiate public relations campaign to address user information, apathy, image.

6. Lobby legislators for support.

Resources and mechanisms to complete the above activities include:

Public service announcements
Concerned groups (e.g., AARP, agricultural organizations such as the Grange and the FFA, university extension)
Print media
Carriers
Local government
Legislators
Businesses

Medical centers
Student and youth groups
Tour and charter groups
Tourism businesses.

Group 3:

1. Find more small operators willing to take the risks associated with starting the new services.

   Note: government as facilitator and to ease insurance problems (tort reform).

2. Need an overseeing body to promote cooperation and communication between the modes.

   Resources: AARP, people from other modes, State and local government officials.

3. Initiate lobbying effort before Congress and DOT, etc., by existing organizations (e.g., UBOA, NASTA, ABA, Farm Bureau).

Group 4:

1. Build an information base regarding rural intercity passenger transportation (RIPT) problems, extent of the market, policy options, and service models.

2. Establish a national forum for RIPT including users, public agencies, providers (all types), and trade organizations that will develop program intiatives/action agendas to enhance rural intercity transportation service quality.

3. Elaborate an existing Rural Transportation Planning Committee at the national level by expanding membership to include AARP, Airport Ground Transportation Association, American Bus Association, International Taxicab Association, public school administrators, and school transportation association in order to accomplish strategy #2 and raise awareness via media.

4. Seek equitable share of public dollars to develop program initiatives (#2) if needed.

5. Establish a multimodal rural passenger transportation system for users that is nonpreferential.

Group 5:

1. Allocate time for communication at local, State, and regional levels between rural clients and businesses.

2. Increase communication between public and private sectors.

3. Develop a transportation network (trunk-hub system).

4. (And thereby) Increase ridership and concurrently improve the quality and quantity of service.

Output for the Eastern Region

Goals

To provide intercity transportation access to everyone/everywhere by:
- — augmenting existing intercity service.
- — providing feeder service.
- — promoting coordination and cooperation between public and private transportation providers.
- — utilizing resources in the most effective and efficient way.
- — marketing.

To provide consistent, reliable funding dedicated to intercity bus:
- — reinstate Federal funding for intercity bus transportation.

To market and coordinate social service transportation and other rural feeder services, including schoolbuses, to the intercity transportation transportation networks (bus/rail/van, etc.).

To enhance public/private cooperation:
- — maintain intercity bus as an industry in the private sector.

To establish a national rural intercity transportation knowledge center and data base, including annual reports on state activities on rural intercity transportation

To develop State/local awareness and support.

To enhance innovation.

To identify and activate constituency.

To define the nature of intercity bus transportation (consisten definitions).

To identify rural mobility problems and resources.

Constraints

Federal, State and Local fiscal/staff/time limitations.

Public and private turf protection by service providers and among agencies.

Lack of Federal policy/leadership on intercity bus transportation.

Lack of cooperation between public (Federal, State, local) and private transportation providers.

Inconsistent definitions/understandings of rural transportation issues at regional and national levels.

Lack of adequate communication forums among operators.

Regulatory problems.

Lack of information/data.

Lack of organized constituency.

Vehicle/organization for implementation.

Distribution of limited resources.

Lack of public commitment.

Strategies By Goal

Goal—To develop reliable funding sources (Group 4)

Strategy: States to develop management plans in conjunction with providers/users which include:

— identifying and promoting feeder service.
— encouraging Section I8 operators to become rural connectors.
— UBOA to encourage operators to participate in feeder service.
— marketing.
— promoting coordination between public and private operators.
— increasing private awareness/education.
— government needs to do more long-range planning (examine changing trends).

Require current program to set aside fund at Federal level up front for rural/intercity programs (dedicated Federal funding source).

Readjust existing funding sources (Essential Air Service subsidies, Section 18, Section 16(b)(2), HHS funds) into block grants to States to support rural and intercity transportation.

Goal—To develop reliable funding sources (Group 3)

Strategy: — bring together actors (e.g., State conference).
— develop constituency.
— present information on lack of funding.
— identify public benefit.
— present/publicize need and demand to:

- elected officials
- agency staff
- general public
- business community.

— present information on impacts/isolation.
— identify legislative advocates:

- geographic
- constituent interest

— identify funding sources:

- tax strategies
  - casino/lottery
  - benefit - area
  - gasoline/auto fees
- bonds
- oil overcharge.

Actors: — elected officials
— constituents:
- users associations (NARP, AARP)
- providers
- UMTA/USDA
- State DOT's (AASHTO)

— business community
— education community
— associations:

- State and national bus associations (UBOA)
- State and national transit (urban)
- State and national rural associations.

Resources:
— information—needs and demand, probable service loss.
— information on other programs.
— legislative advocate.

Goal—To augment or maintain existing intercity bus service

Strategy: — determine need and demand.
— obtain data.
— match service to demand: frequency, vehicle size, etc.
— alternative management/operating arrangements to lower costs.
— develop state funding programs.

Actors:
- — intercity carriers
- — State DOT's
- — U.S. DOT/UMTA
- — Local governments
- — Users (associations).

Resources:
- — carriers/users
- — UMTA Section I8
- — State funds.

Goal—To enhance public/private cooperation

Strategy: Involve States in the AASHTO 2020 effort to represent intercity passenger needs.

Goal—To develop feeder service

Strategy:
- — Needs assessment:
  - trip O & D surveys of current users
  - demographics
  - loss of previous service (ridership when discontinued).
- — develop any needed funding:
  - marketing
  - additional service (if needed).
- — identify local feeder carriers and promote involvement.
- — coordinate schedules and services.
- — develop staff to coordinate and implement:
  - State DOT's
  - carriers.
- — develop constituency.
- — marketing:
  - local
  - national/intercity.

Actors:
- — operators:
  - human services
  - Section 18
  - local privates (taxicab, limo, schoolbus, commuter, van)
  - ferry boat

- Amtrak
- airport authorities.

— employers.
— State DOT's, HHS-type agencies.
— economic development groups.
— UMTA (Rural America grant).
— users.
— local governments.

Resources:

— users - through fares.
— employers—subsidies.
— Section I8/Human Service.
— State funding.
— local funding, other (marketing, agency).

Output for the Western Region

Goals

Maximize utilization of resources:

- Coordinate/consolidate/utilize existing services for passengers and freight.
- Consolidate to avoid duplication of publicly funded services.
- Maximize use of existing transportation resources.

Develop a national policy/strategy:

- Develop and update a national transportation policy which includes intermodal coordination (mandate State DOT's to strengthen mission statements re: transportation issues) (Stable funding must be assured).
- Develop nationally coordinated strategies for transportation.

Conduct a rural transportation needs assessment:

- Develop consistent means of measuring needs.
- Determine the need for services in rural areas and strategies for meeting these needs.

Provide affordable, effective transportation for rural people.

Allow greater flexibility in mixing funding sources.

Promote local involvement in national strategies:

- Mobilize local talent to carry out national strategies.
- Rural communities need to actively participate in identifying needs and service areas, and promote and use services.

Stimulate development of resources to address rural transportation issues (people and dollars).

Encourage increase of Section 18 funds and other fund sources for rural transportation.

Foster economic revitalization of rural America (support transportation element).

Promote delivery of safe transportation systems/services to underserved population areas.

Encourage rural services to meet a variety of transit needs (commuter, medical, social, etc.).

Constraints

Uncoordinated transportation policies and programs.

Poor public image for transit bus/facilities.

Conservative, entrenched bureaucracy, i.e., highway department and local administration resisting passenger transportation innovations.

Inability to define needs.

"Turfism" between governments and modes.

Lack of cohesive rural constituency.

Limited public funding and distribution of existing resources.

Insurance costs and availability.

"Rugged individualism" attitude of Western United States.

Lack of congressional recognition of the problem and financial support.

Lack of support by States for these activities.

Population density to support mass transit is inadequate.

American attitude (high dependency on the automobile).

Lack of coordination between Greyhound and local providers.

Funding constraints imposed by institutional (county, State local) regulations/lack of funds.

Strategies By Goal

Group 1

Goal—Development of a national policy/strategy

1. Develop and update a national transportation policy.
2. Develop nationally coordinated strategies for transportation.

Strategies:

What: 1. Educate in terms of needs, benefits, and actions.
2. Develop an awareness of existing funding sources and other resources that relate to transportation services.
3. Influence groups with power: National Governor's Conference, State Legislatures, Council of State Legislatures (International), National Chamber of Commerce, American Association of Retired Persons, human resource groups, consumer advocates.

When: Begin—Omaha plus 6 months.
Commitment at Omaha plus 18 months to have a national policy discussion under way.

Who: Informal Lobby: American Public Transit Association (APTA)
Farm Bureau

Industry
Citizens (encouraged by operators)

U.S. Dept. of Agriculture (including Extension Service)
U.S. Dept. of Transportation (including Urban Mass Transportation Administration)

Chambers of Commerce
Rural America
American Association of Retired Persons
Dept. of Rehabilitation, Veteran's Administration
Grey Panther
National Assn. for Transportation Alternatives
Commercial Motor Vehicle Safety Alliance
National Highway Transportation Safety Admin.
State Transit Associations
Dept. of Aging
U.S. Dept. of Health and Human Services
United Bus Owners of America
California Association of Physically Handicapped
Government coalition.

Goal—Rural Transportation Needs Assessment

1. Develop consistent means of measuring needs.
2. Determine the need for services in rural areas and strategies for meeting these needs.

Strategies:

What: Consistent approach to needs assessment.
Develop minimum acceptable criteria.

When: Begin policy that includes predefined needs.
Completion: 12 months.

Who: State involvement by appropriate agencies:
State departments of transportation
Department of Commerce
Dept. of Aging
Dept. of Health
Disabled Services
Federal involvement:
Department of Agriculture
Department of Transportation, including the Urban Mass Transportation Administration.

Group 2

Goal—Maximize utilization of resources

1. Coordinate/consolidate/utilize existing services for passengers and freight.
2. Consolidate to avoid duplication of publicly funded services.
3. Maximize use of existing transportation resources.

Strategies:

1. Form associations or coalitions of carriers, users, communities.

   What: Information sharing.
   Identify resources.
   Identify needs.
   Develop solutions.
   Create partnerships and become a lobbying coalition.

   When: Following national meeting.

   Who: Regional focus with common needs.

2. Identify incentives for intermodal cooperation.

   What: Viable services, increased revenue, prevent rural deterioration, expedite transfer, improve efficiency of each mode, conserve energy and funds.

   When: New Surface Transportation Assistance Act (STAA), feed into 2020 process, 50-I5.

   Who: Common carriers, regional air, Amtrak, public transit, Social Services, taxis, school bus, contract carriers (business, mining, health care, etc.), Indian reservations, less-than-total load freight, air express, rural mail delivery, ambulances, nonprofits.

3. Identify and remove restrictive laws, regulations and rules.

   What: Rewrite laws, streamline regulations, court action.

   When: New STAA.

   Who: Associations and coalitions, Federal, State, and local governments.

Goal—To provide affordable, effective transportation for rural people

Strategies:

1. Bring together all available funding resources, public and private.

What: Rewrite laws, regulations.
Develop matching funds (dollars and in-kind) and solicit private sector contributions.

Who: Regional associations and coalitions, local communities (matching funds), State governments, Federal government.

2. Increase utilization of transportation resources.

What: Improve image and make service attractive.
Make service easy to use.
Effective marketing.
Responsive to demand.

When: Now!

Who: Persons living in service areas, carriers, communities.

3. Improve convenience and usefulness.

What: Single-day round trip, intermodal connections, special equipment (handicapped accessible, car infant seats), communication equipment.

When: Ongoing.

Who: Carriers, service providers (appointments), business hours, manufacturers (shift schedules).

Group 3

Goal—Greater flexibility in mixing funding sources

Strategies:

What: Identify unknown Federal (and State), transportation-"related" dollars and constraints on those funds.

When: Determine amounts in the current draft Federal budget.

Who: A task force familiar with current process and programs (membership of "local" experts, not the standard program staff representing Federal department or agency or National Association for Transportation Alternatives (NASTA).

What: Evaluate constraints vs. national "transit" policy for minimum uniform level of service.

When: Program to be undertaken by next "presidential administration" (after they realize the need following their reading of our symposium results).

Who: The public and private sectors, and "Social Service Mass Transportation Administration."

What: Consider benefits of a "Mobility" Block Grant Program.

When: By May 1989.

Who: The task force.

What: Establish policy that encourages cross-matching of resources.

When: Next week (long overdue).

Who: The task force.

What: Promote the crossing of jurisdictional boundaries to facilitate intercity, intercounty, interstate travel.

When: 1991.

Who: Responsive "transit"-minded professionals.

What: Create funding source for Task Force.

When: Immediately.

Who: Diversion of a portion of national RTAP funds.

Goal—Local Involvement in National Strategies

1. Mobilize local talent to carry out national strategies.
2. Rural communities need to actively participate in identifying needs and service areas and use services.

Strategies:

What: Grassroots approach to defining national (local) transit policy (minimum).

When: November 1990 (next congressional election period).

Who: Formation of an entrepreneurial commission.

What: Media alert.

When: During the next 9-month period.

Who: Mr. John Madden.
What: Involve dominant special interest/user groups (AARP, riders, Adapt, transit-dependent constituency).

When: November 1989.

Who: The new task force.

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☆U.S. GOVERNMENT PRINTING OFFICE: 1988-524-506